UMASS/AMHERST
31206005806470

DATE DUE			

UNIVERSITY OF MASSACHUSETTS
LIBRARY

S
74
N83N8
1853

TRANSACTIONS

OF THE

Norfolk Agricultural Society,

FOR

1853.

DEDHAM, MASS.:
PUBLISHED BY THE SOCIETY.

TRANSACTIONS

OF THE

NORFOLK

AGRICULTURAL SOCIETY,

FOR

1853.

DEDHAM, MASS.

PUBLISHED BY THE SOCIETY.

LIBRARY
UNIVERSITY OF
MASSACHUSETTS
AMHERST, MASS.

630.06
N76
1853

PRESS OF DAMRELL & MOORE AND GEORGE COOLIDGE,
16 Devonshire Street, Boston.

CONTENTS.

PAGE.

Act of Incorporation, ... 5
Constitution, ... 6
Officers of the Society, 1853, ... 11
Names of members, ... 15
Address, by Rev. F. D. Huntington, ... 29
Reports: —
Of the President and Secretary to the Board of Agriculture, ... 59
On Farms, ... 63
On Ploughing — Double Teams, ... 72
On Ploughing — Single Teams, ... 72
On Ploughing — Horse Teams, ... 73
On Spading, ... 73
On Fat Cattle, ... 74
On Bulls, ... 74
On Cows, ... 76
On Heifers, ... 81
On Working Oxen, ... 83
On Steers, ... 84
On Horses, ... 84
On Swine, ... 86
On Poultry, ... 98
On Dairy, ... 99
On Bees, ... 101
On Roots and Vegetables, ... 102
On Fruits and Fruit Culture, ... 104
On Flowers, ... 111
On Ladies' Work, ... 113
On Bread, ... 114
On Agricultural Implements, ... 115
On Straw Goods, ... 116
On Carriages, ... 117
On Cloth, Flannels, Hosiery, Wool, Carpetings, &c., ... 117
On Leather, ... 118
On sundry Manufactures, ... 118
On Fruit Trees, ... 119
On Grain Crops, ... 120
Mr. Newhall's Crop of Ruta Baga Turnips, ... 137

PAGE.
Presentation of the World's Prize Plough, ... 139
On Poultry, ... 141
Report on Essays,— 146
On the Potato, ... 147
Address before the Norfolk County Agricultural Society, ... 161
Treasurer's Report, ... 175
Circular of the Norfolk Agricultural Society, ... 176
Order of Exercises on the Fifth Anniversary of the Norfolk Agricultural Society, ... 179
List of Premiums awarded 1853, ... 193
List of Premiums offered for the year 1854, ... 196
Rules and General Remarks, ... 216

COMMONWEALTH OF MASSACHUSETTS.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND FORTY-NINE.

An ACT to incorporate the Norfolk Agricultural Society.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECT. 1.—Marshall P. Wilder, Charles F. Adams, B. V. French, their associates and successors, are hereby made a corporation, by the name of the Norfolk Agricultural Society, for the encouragement of Agriculture and Horticulture, Manufacturing and Mechanic Arts, in the County of Norfolk, by premiums and other means; with all the powers and privileges, and subject to all the duties, restrictions, and liabilities set forth in the forty-second and forty-fourth chapters of the Revised Statutes; and said Corporation may hold and manage Real Estate not exceeding in value twenty-five thousand dollars, and Personal Estate not exceeding a like sum, for the purposes aforesaid.

SECT. 2.—This Act may be accepted by the Society at any meeting called according to the provisions of its Constitution.

House of Representatives, March 26, 1849.

Passed to be enacted. FRANCIS B. CROWNINSHIELD, *Speaker.*

In Senate, March 27, 1849.

Passed to be enacted. JOSEPH BELL, *President.*

March 27, 1849.

Approved. GEO. N. BRIGGS.

CONSTITUTION.

Preamble.

Impressed with the importance of the advantages to be derived, by associated effort, in carrying forward successfully every great enterprise having for its object the improvement of the community, the Farmers, Horticulturists, and Manufacturers, of the County of Norfolk, have resolved to establish a Society, and to be governed by the following

Constitution.

Article I. — The association shall be known by the name of "The Norfolk Agricultural Society."

Article II. — There shall be a President, six Vice Presidents, a Corresponding and Recording Secretary, Treasurer, and Executive and Finance Committees, who shall be Trustees, *ex officio*. Besides these, four additional Trustees shall be chosen from each town in the County, excepting the city of Roxbury and the town of Dorchester, which shall each be entitled to six. All officers enumerated in this article shall continue in office until others are elected in their stead.

Article III. — All officers of the Society shall hereafter be chosen by ballot. The election shall be determined by a majority of votes.

Article IV. — The names of persons to be balloted for at the annual election, shall be contained on one ballot; and the offices for which they are respectively nominated shall be distinctly designated.

Article V. — There shall be two stated meetings of the Society, annually, viz.: On the last Wednesday in March and on the last Wednesday in September; the same to be held at ten o'clock in the forenoon, at such place as the Trustees shall appoint; of which they shall give notice — in two of the Boston newspapers and in the County papers — at least three weeks previous to the meeting.

Article VI. — There shall be, after the year 1849, an annual choice of officers, viz., at the stated meeting in March. In the choice of officers, thirteen members shall make a quorum; in the transaction of other business, seven may make a quorum.

Article VII. — If, at any meeting of the Society, or of the Trustees, the President and Vice Presidents shall be absent, the members present may appoint one from among them to preside at such meeting.

Article VIII. — The President, or, in case of his absence, either of the Vice Presidents, with the advice of the Trustees, may call a special meeting of the Society; or whenever written application, with reasons assigned therefor, shall be made by any twelve members of the Society to the President and Trustees, they shall call such meeting.

Article IX. — The meeting of the Trustees shall be held at such time and place as they shall, from time to time, agree upon; and seven of them, including the presiding member, shall make a quorum for doing business.

Article X. — The Executive Committee shall recommend such measures as they shall judge necessary and expedient; and, in conjunction with the Trustees, shall regulate all the concerns of the Society, during the intervals of its meetings; propose such objects of improvement to the attention of the public, appoint such committees, publish such communications, and offer such premiums, in such form and value, as they shall think proper — provided the premiums offered do not exceed the funds of the Society; and shall lay before the Society, at each of its meetings, a statement of their proceedings, and of the communications made to them.

Article XI. — No transfer, by the Treasurer, of any stock, evidence of debt, or security, shall be deemed valid, unless made by the order of the Finance Committee.

Article XII. — Any person, by paying into the treasury the sum of five dollars, and signing the rules adopted by the Society, shall be entitled to all the privileges of membership. Any lady may be admitted, by paying the sum of two dollars.

Article XIII. — The Recording Secretary shall take minutes of all the votes and proceedings of the Society and of the Trustees, and enter them in separate books; and shall record all such communications as the Trustees may direct.

Article XIV. — The Corresponding Secretary shall write all letters relating to the business of the Society, and answer all letters to the Society, as the Trustees shall direct.

Article XV. — The Treasurer shall receive all moneys due or payable to the Society, and all donations that may be made to it; for which he shall give duplicate receipts — one of which shall be lodged with the Recording Secretary — and make a fair record thereof; and, from time to time, pay out such moneys as he shall have orders to from the Trustees; and shall, annually, and whenever thereto required, render a fair account of all his receipts and payments to the Society, or a Committee thereof.

Article XVI. — A Committee shall be chosen at the annual meeting in March to audit the Treasurer's accounts, and to report thereon at the next March meeting; and the same being accepted, shall be entered by the Recording Secretary on his books.

Article XVII. — In case of the death, resignation, incapacity, or removal out of the County, of either of the Secretaries, or the Treasurer, the Trustees shall take charge of the official books, papers, and effects, belonging to the office that may be vacated, and give receipts for the same; which books, papers, &c., they may deliver to some person whom they may appoint to fill the office until the next meeting of the Society; at which time there shall be a choice.

Article XVIII. — A Committee shall be appointed, from time to time, severally to solicit and receive subscriptions for raising a fund to encourage the objects for which the Society has been founded — the improvement of the Agriculture, the Horticulture, and the Manufactures of the County — the same to be sacredly appropriated to these objects only.

Article XIX. — All donations made to the Society shall be permanently invested; the income only to be applied to premiums and gratuities, unless specially directed otherwise by the donor.

Officers of the Society.

1853.

President.

MARSHALL P. WILDER, *of Dorchester.*

Vice Presidents.

BENJAMIN V. FRENCH, *of Braintree,*
SAMUEL D. BRADFORD, *of West Roxbury,*
CHEEVER NEWHALL, *of Dorchester,*
JOHN GARDNER, *of Dedham,*
RALPH SANGER, *of Dover,*
CHARLES C. SEWALL, *of Medfield.*

Corresponding and Recording Secretary.

EDWARD L. KEYES, *of Dedham.*

Treasurer.

HENRY W. RICHARDS, *of Dedham.*

Executive Committee.

MARSHALL P. WILDER, *of Dorchester*,
OTIS CARY, *of Foxboro'*,
SAMUEL WALKER, *of Roxbury*,
THOMAS MOTLEY, *of Dedham*,
AARON D. WELD, *of West Roxbury*.

Finance Committee and Auditors.

EBEN WIGHT, *of Dedham*,
JOHN GARDNER, *of Dedham*,
ENOS FOORD, *of Dedham*.

Board of Trustees.

BELLINGHAM.

ASA PICKERING, PAUL CHILSON.

BRAINTREE.

EDWARD POTTER, DAVID N. HOLLIS,
JONATHAN FRENCH, CALEB HOLLIS.

BROOKLINE.

MARSHALL STEARNS, SAMUEL HENSHAW,
JAMES BARTLETT, JOHN H. DANE.

CANTON.

ELISHA WHITE, JOHN ENDICOTT,
WILLIAM TUCKER, ELLIS TUCKER.

COHASSET.

JAMES C. DOANE, SOLOMON J. BEAL,
LABAN SOUTHER, WILLIAM B. JOHNSON.

DEDHAM.

SAMUEL C. MANN, JESSE FARRINGTON,
WILLIAM KING GAY, *NATHANIEL COLBURN.

*Deceased.

DORCHESTER.

EDWARD KING, ELI W. ROBINSON,
JOHN H. ROBINSON, HENRY LIVERSIDGE,
AARON D. CAPEN, SAMUEL J. CAPEN.

DOVER.

HIRAM W. JONES, BENJAMIN N. SAWIN,
CALVIN RICHARDS, AARON BACON.

FOXBORO'.

FREEDOM GUILD, SIMEON BURR,
ALFRED HODGES, JEREMIAH M. SHEPARD.

FRANKLIN.

WARD ADAMS, ARCHIBALD DE WITT,
GEORGE W. MORSE, MAXCY FISHER.

MEDFIELD.

THOMAS T. RICHMOND, GEORGE DAVIS,
GEORGE F. ADAMS, HENRY PARTRIDGE, JR.

MEDWAY.

HORATIO MASON, JOHN P. JONES,
ABIJAH R. WHEELER, JAMES P. CLARK.

MILTON.

CHARLES BRECK, JOHN ARNOLD, JR.,
LEWIS COPELAND, ELIJAH TUCKER.

NEEDHAM.

WILLIAM FLAGG, DANIEL KIMBALL,
WILLIAM PIERCE, GARDNER G. HUBBARD.

QUINCY.

HORATIO N. GLOVER, JOSEPH W. ROBERTSON,
JOSIAH BRIGHAM, WILLIAM S. MORTON.

RANDOLPH.

ROYAL W. TURNER, ADONIRAM WHITE,
JOSEPH LEEDS, C. S. HOLBROOK.

ROXBURY.

AARON D. WILLIAMS, GEORGE DAVENPORT,
CHARLES ELLIS, JAMES GUILD,
WILLIAM B. KINGSBURY, JOHN FUSSELL.

SHARON.

OTIS JOHNSON, WILLIAM R. MANN,
CALVIN TURNER, ASAHEL S. DRAKE.

STOUGHTON.

LUCIUS CLAPP, ROBERT PORTER,
LUTHER PORTER, SAMUEL W. CURTIS.

WALPOLE.

TRUMAN CLARKE, JOHN A. GOULD,
FRANCIS W. BIRD, SHADRACH S. PIERCE.

WEST ROXBURY.

STEPHEN M. WELD, THOMAS MOTLEY, JR.,
JOSEPH H. BILLINGS, JOHN J. LOW.

WEYMOUTH.

LEMUEL HUMPHREY, NATHANIEL SHAW,
JAMES JONES, JAMES TIRRELL.

WRENTHAM.

CALVIN FISHER, JR., BENJAMIN HAWES,
ARTEMAS ALDRICH, HARVEY E. CLAP.

Names of Members.

—※—

BELLINGHAM.

Chilson, Paul
Pickering, Asa

2.

BRAINTREE.

Arnold, John B.
Arnold, Joseph A.
Bowditch, Ebenezer C.
Chace, George
Dyer, Isaac
Dyer, Joseph
Fogg, Charles M.
French, Benjamin V.
French, Mrs. B. V.
French, Jonathan
Hollis, Caleb
Hollis, David N.
Hollis, John A.
Hollis, Josiah
Ludden, Joseph T.
Mansfield, John
Mansfield, Warren
Morrison, Alva
Niles, Daniel H.
Penniman, Ezra
Perkins, Oliver
Potter, Edward
Randall, Apollos
Stetson, Amos W.
Stetson, Caleb
Thayer, Ebenezer C.
Thayer, Hezekiah
Vinton, Thomas B.
Wales, George
*Willis, George W.

30.

BROOKLINE.

Amory, James S.
Babcock, George
Bartlett, James
Bird, Jesse
Blake, George Baty
Craft, Samuel
Crafts, George
Corey, Elijah
Corey, Timothy
Dane, John
Dane, John H.
Ferris, Mortimer C.
Fisher, Francis
Frazar, Amherst A.
Griggs, Thomas
Henshaw, Samuel
Howe, James Murray
Howe, John
Jameson, William H.
Kellogg, Charles D.
Lawrence, Amos A.
Shaw, G. Howland
Stearns, Charles, Jr.
Stearns, Marshall
Thayer, John E.
Trowbridge, John H.
Turner, John N.

27.

CANTON.

Abbott, Ezra
Billings, Uriah
Billings, William
Bowditch, J. I.
Bray, Edgar W.
Capen, Samuel

* Deceased.

Deane, Francis W.
Deane, Thomas
Downes, George
Draper, Thomas
Dunbar, James
Dunbar, Nathaniel
Eldridge, John S.
Endicott, John
*Everett, Leonard
Fenno, Jesse, Jr.
French, Thomas
Fuller, Daniel
Guild, Horace
Howard, Lucius
Huntoon, Benjamin
Kinsley, Lyman
Kollock, Jeremiah
Lincoln, Frederic W.
Mansfield, William
McIntosh, Adam
McIntosh, Roger S.
McKendry, William
Messinger, Vernon A.
Messinger, Virgil J.
Morse, William
Shepard, James S.
Spare, Elijah
Spaulding, Corodon
Stetson, Joseph
Sumner, James T.
Tilt, Benjamin B.
Tucker, Edmund
Tucker, Ellis
Tucker, Jedediah
Tucker, Nathaniel, Jr.
Tucker, Phineas
Tucker, William
Wentworth, Edwin
Wentworth, Nathaniel
White, Elisha
White, Nathaniel S.

47.

COHASSET.

Beal, Solomon J.
Beal, Mrs. S. J.
Doane, James C.
Johnson, William B.
Sohier, William D.
Souther, Laban
Tower, Abraham H.

7.

DEDHAM.

Adams, Benjamin H.
Alden, Abner
Alden, Francis
Alden, George
Alden, Leonard
Alden, Samuel F.
Ames, William
Babcock, Samuel B.
Bacon, Silas D.
Baker, David A.
Baker, Joel M.
Baker, Obed
Baker, Timothy
Balch, Benjamin W.
Balch, Joseph W.
Barrows, Thomas
Bates, Martin
Bosworth, Isaac C.
Boyden, Addison
Boyden, Benjamin
*Bryant, Austin
Bullard, Elijah
*Bullard, John
Bullard, Lewis
Burgess, Ebenezer
Capen, Charles J.
Capen, Oliver
Carroll, Sanford
Chase, James M.
Chickering, Horatio
Clapp, Edward
Clapp, Nathaniel
Clark, Joseph W.
Clarke, Horatio
Cleveland, Ira
Cleveland, Stephen H.

Cobb, Jonathan H.
* Colburn, Nathaniel
Colburn, Waldo
Coolidge, George
Cormerais, Henry
Crane, Ebenezer P.
Crocker, Amos H.
Crossman, Charles B.
Damrell, William S.
Daniell, Ellery C.
Day, Joseph
Deane, John
Dixon, Rufus E.
Doggett, John
Donahoe, Patrick
Downing, James
Drayton, John
Duff, John
Dunbar, Thomas, Jr.
Eaton, John
Eaton, John Ellis
Eaton, Luther
Ellis, Calvin F.
Ellis, Charles
Ellis, Colburn
Ellis, George
Ellis, Merrill D.
Ellis, Oliver
Fairbanks, William
Farrington, Charles
Farrington, James
Farrington, Jesse
Farrington, John B.
Fisher, Alvan
Fisher, Ebenezer S.
Fisher, Freeman
Fisher, James R.
Fisher, Joseph
Fisher, Thomas
Foord, Enos
French, Abram
Fuller, George
Gardner, John
Gay, Ebenezer F.
Gay, Jeremiah W.
Gay, Lusher
Gay, William King
Green, Elisha
Guild, Francis
Guild, Henry
Hartshorn, Richard D.
Haynes, Edward, Jr.
Holmes, Edward B.
Houghton, William A.
Howe, Francis
Howe, Josiah D.
Johnson, Edwin
Keyes, Edward L.
Kingsbury, Lewis H.
Kingsbury, Moses
Lamson, Alvan
Mann, Henry A.
* Mann, Herman
Mann, Samuel C.
Mann, William H.
Marsh, Mrs. Martin
Marsh, Martin
Mason, William
Mitchell, Francis N.
Morse, John
Morse, John L.
Motley, Thomas
Noyes, Nathaniel
Otis, Benjamin H.
Patterson, Albert C.
Phillips, Freeman
Quincy, Edmund
Rand, Edward S.
Rand, William T.
Rice, John P.
Richards, Abiathar
Richards, Edward M.
Richards, Henry White
* Richards, Jeremiah F.
Richards, Mason
Richards, Reuben
Richards, Reuben A.
Richards, William B.
* Redman, Alfred
Russell, Ira
Sampson, Ezra W.
Scanlan, David

Scott, Joel
Shaw, Charles B.
Sherman, Charles B.
Sherwin, Thomas
Sigourney, Henry H. W.
Smith, Lyman
Smith, Nathaniel
Smith, Nathaniel, Jr.
Smith, Thomas
Spear, Henry F.
Stimson, Jeremy
Stone, Eliphalet
Sumner, William R.
Sutton, Enoch
Taft, Ezra W.
Thompson, Joshua P.
Thompson, Robert
Tubbs, Benjamin H.
Vose, George H.
Washburn, Alexander C.
Weatherbee, Comfort
Weatherbee, Jesse
Weatherbee, John E.
Webb, Moses E.
Webb, Seth, Jr.
* White, John
Whiting, Hezekiah
Whiting, Moses
Whiting, William
Whitney, Samuel S.
Wight, Ebenezer
* Wilson, John F.
Winslow, George

161.

DORCHESTER.

Abbott, William E.
Adams, Benjamin W.
Austin, William R.
Bacon, Charles H.
Baker, Edmund J.
* Baker, Walter
Baldwin, Enoch
Barnes, Parker
Barry, Michael O.
Bass, Seth B.
Billings, Lemuel
Bispham, Eleazer J.
Bradlee, James B.
Breck, Henry Jr.
Brewer, Darius
* Brooks, Noah
Brooks, Williams B.
Browne, George M.
Capen, Aaron D.
Capen, Samuel J.
Capen, Thomas W.
Carruth, Charles
Carruth, Nathan
Childs, Nathaniel R.
Clapp, John P.
Clapp, Richard
Clapp, William
Codman, John
Codman, Robert
Copenhagen, Arnold Wm.
Crane, Nathaniel
Curtis, Ebenezer
Cushing, Abel
Cushing, Abner L.
Cushing, Benjamin
Davis, Barnabas
Dearborn, Axel
Denny, Daniel
Dorr, James
Downer, Samuel, Jr.
Follansbee, Isaac W.
Foster, William H.
Fowler, M. Field
Gilbert, Samuel, Jr.
Gleason, Moses
Gleason, Roswell
Gleason, Sewall
Grew, Henry
Groom, Thomas
Hall, Oliver
Hall, Samuel
Hammond, Horatio
Hardy, Alpheus
Hewins, John C.
Hickey, William

Holbrook, Nathan
Holmes, Ebenezer
Hooper, Franklin Henry
Hooper, Robert C.
Hooper, Robert C., Jr.
Houghton, George A.
Howe, Charles
Humphrey, Henry
Hunt, Charles
Jacobs, Benjamin
Jones, Nahum
King, Edward
King, Franklin
Lee, James, Jr.
Leonard, Joseph
Liversidge, Henry
* Liversidge, Stephen
Marshall, William
May, John J.
Means, James H.
Mears, John
Mears, John, Jr.
Miller, Erasmus D.
Minot, John
Moseley, Flavel
Nazro, John G.
Newhall, Cheever
Newhall, John M.
Payson, Thomas
Perrin, Augustus W.
Peters, Henry H.
Pierce, Charles Bates
Pierce, Edward L.
Pierce, Jesse
Pierce, Lewis
Pierce, Robert
Pierce, William
Pierce, William B.
Pierce, William P.
Pope, Alexander
Pope, William, Jr.
Preston, Edward
Preston, John
Preston, John, 2d
Prince, William G.
Prouty, Lorenzo
Richardson, George
Richardson, William H.
Rideout, Asa
Robinson, Mrs. Diantha A.
Robinson, Eli W.
Robinson, John H.
Robinson, Stephen A.
Ruggles, Edward H. R.
Safford, Nathaniel F.
* Scudder, Horace
Spear, Luther
Spooner, John P.
Sumner, Clement
Swan, James
Temple, Hannaniah
Temple, William F.
Thayer, Benjamin W.
Tileston, Edmund P.
Tileston, Samuel
Tolman, Ebenezer
Tolman, William
Train, Enoch
Tremlett, Thomas
Trull, John H.
Trull, Mrs. J. H.
Trull, John W.
Tuttle, Joseph
Vose, Robert
Vose, Robert, Jr.
Welch, John H.
Welch, Mrs. J. H.
Whipple, John L.
Wilder, Marshall P.
Wilder, Mrs. M. P.
Williams, Sidney B.
Woodman, James
Worthington, William
Worthington, William F.
Wright, Edmund
Wright, Mrs. Edmund
Wright, Otis

142.

DOVER.

Allen, Jared
Allen, Timothy

Bacon, Aaron
Baker, Jabez, Jr.
Battelle, John
Battelle, Ralph
Bigelow, Calvin
Bigelow, William A.
Chickering, Daniel
Chickering, Otis
Cleveland, William
Goulding, Henry
Jones, Hiram W.
Mann, Daniel
Mann, Daniel F.
Mann, Hollis
Newell, Jesse
Perry, Elijah
Perry, Mehitable
Richards, Calvin
Richards, Luther
Sanger, Ralph
Sawin, Benjamin N.
Shumway, Amos W.
Shumway, John W.
Smith, Abner L.
Tisdale, William
Upham, Walter W.
Wall, Patrick
Wilson, Edwin
Wilson, Ephraim

31.

FOXBORO'.

Aldrich, Henry D.
Belcher, Lewis W.
Burr, Simeon
Capen, James
Carpenter, Daniels
Carpenter, Erastus P.
Cary, Otis
Fisher, Albert
Foster, James W.
Guild, Freedom
Hersey, David
Hodges, Alfred
Kingsbury, Joseph
Leonard, Samuel B.
Leonard, Sanford
Pettee, David
Pettee, Joseph G.
Pettee, Simon E.
Shepard, Jeremiah M.
Sherman, Job
Sumner, Charles C.
Torrey, Martin
Wyman, David

23.

FRANKLIN.

Adams, Peter
Adams, Ward
Baker, David P.
Bullard, Piam
Daniels, Albert E.
DeWitt, Archibald
DeWitt, Mrs. Mary Ann
Fisher, Herman C.
Fisher, Maxcy
Fisher, Walter H.
Green, Martin
Harding, Lewis
Hills, Theron C.
Knapp, Alfred
Metcalf, Alfred G.
Metcalf, William
Miller, John W.
Miller, Philip W.
Morse, George W.
Morse, Joseph
Nason, George W.
Ray, James P.
Ray, John P.
Rockwood, Erastus
Thayer, Davis, Jr.
Wadsworth, Joseph H.
Whiting, Joseph
Whiting, Joseph M.
Whiting, William E.

29.

MEDFIELD.

Adams, George F.
Allen, William C.
Baker, Joseph
Balch, Albert
Bullard, John E.
Carson, Joseph
Chenery, William
Cheney, Nathaniel H.
Cheney, Seth
Cushman, Jacob R.
Davis, George
Ellis, Caleb
Ellis, John
Ellis, Samuel
Fisher, Hinsdale
Fisher, Wm. Quincy
Fiske, George
Fiske, Isaac
Hamant, Caleb S.
Hamant, Charles
Hamant, Daniels
Harding, Nathan
Hartshorn, Joseph
Hartshorn, Warren
Hewins, William P.
Partridge, Mrs. E. A.
Partridge, Henry, Jr.
Richardson, Simeon
Richmond, Thomas T.
Roberts, Mrs. Helen M.
Roberts, Robert
Salisbury, William
Sewall, Charles C. Mrs.
Smith, George M.
Stedman, Cyrus
Thayer, Elijah
Turner, John A.

37.

MEDWAY.

Adams, Edward
Adams, Elisha
Adams, Lyman
Adams, Wyman
* Barber, George
Cary, William H.
Clark, James P.
Clark, Willard P.
Crosby, George
Daniels, Adams
Daniels, Jas. Willard
Daniels, Paul
Daniels, William
Ellis, James H.
Fisher, Milton M.
Harding, Theodore
Henderson, William
Hurd, Julius C.
Jones, John P.
Kingsbury, Gilbert
Lovell, Asahel P.
Lovell, Zachariah
Lovering, Warren
Mann, James
Mason, Horatio
Metcalf, Luther
Morse, Asa D.
Partridge, Clark
Partridge, George
Richardson, E. F.
Richardson, Jeremiah D.
Richardson, Joseph L.
Richardson, Richard
Slocumb, Christopher
Walker, John L.
Walker, Timothy
Wheeler, Abijah R.

37.

MILTON.

Adams, Samuel
Amory, Francis
Arnold, John, Jr.
Babcock, Josiah
Babcock, Lemuel Whiting
Babcock, Samuel
Baldwin, Edward
Beal, Jonathan
Bradlee, John D.

Breck, Charles
Bunton, Jesse
Cook, Samuel
Copeland, Charles L.
Copeland, Lewis
Cornell, Walter
Cunningham, C. Loring
Cunningham, Francis
Davenport, Lewis
Davenport, Nathaniel T.
Davis, William H.
Dudley, Benjamin F.
Emerson, Joshua
Fenno, Rufus P.
Forbes, Robert Bennett
Hall, George W.
Hinckley, Thomas H.
Hobson, Miss Martha J.
Houghton, Jason W.
Hunt, Charles K.
Hunt, George
Kent, George W.
* Pope, Ebenezer
Raymond, George
Robbins, James M.
Rodgers, Octavius T.
Rogers, Henry, Jr.
Rowe, Joseph
Thayer, Jason
Thompson, George
Todd, Robert M.
Tucker, Elijah
Tucker, Timothy
West, Henry

43.

NEEDHAM.

Alden, Otis
Aylise, Dr.
Bullen, Ichabod
Carter, Josiah H.
Daniell, George K.
Dewing, Warren
Eaton, George E.
Emmons, Charles P.
Flagg, Solomon
Flagg, William
Gardner, Elbridge
Gilbert, Luther
Harris, John
Harris, John M.
Harvey, Stephen F.
Holland, John
Hollis, A. P.
Hubbard, Gardner G.
Hunnewell, H. H.
Kimball, Benjamin G.
Kimball, Mrs. Betsey G.
Kimball, Daniel
Kingsbury, Lauren
Kingsbury, Lemuel
Kingsbury, Thomas
Kingsbury, William A.
Longfellow, Nathan
Lovell, Charles B.
Lyon, William
Mansfield, John
Mansfield, Robert
McCrackin, John
Mills, John
Mills, Matthias
Morton, Otis, Jr.
Morton, William T. G.
Newell, Artemas
Newell, Benjamin
Noyes, Josiah
Peabody, Ezekiel
Pierce, William
Revere, George
Robinson, Henry
Sawyer, Otis
Scudder, Marshall S.
Seagrave, Saul S.
* Shaw, George W.
Snelling, Nathaniel G.
Stedman, Francis
Stedman, William M.
Stone, David
Stone, H. L.
Sumner, Lewis
* Ware, Dexter

Ware, Reuben
Wells, John
Whitaker, Edgar K.
Wood, Henry

58.

QUINCY.

Adams, Charles Francis
Adams, Ebenezer
* Bartlett, Ibrahim
Bass, Josiah
Bass, Lewis
Baxter, Daniel
Baxter, Elijah
Baxter, George L.
* Beale, George W.
Beals, Nathaniel H.
Billings, Lemuel
Brackett, Lemuel
Brigham, Josiah
Carr, John J.
Curtis, Noah
Eaton, Jacob F.
Emmons, N. H.
Fellows, Ensign S.
Frederick, Eleazer
Glover, Horatio N.
Greenleaf, Daniel
Greenleaf, Thomas
Horton, Lloyd G.
Miller, Charles E.
Morton, William S.
Munroe, Israel W.
Newcomb, James
Newcomb, John B.
Quincy, Josiah
* Richards, Lysander
Robertson, Joseph W.
Rodgers, Clift
Savil, John
Spear, Charles A.
Stetson, James A.
Thayer, Gideon F.
Torrey, William
Walker, William
White, Nathaniel
Willard, Solomon
Williams, Francis

41.

RANDOLPH.

Alden, Ebenezer
Alden, Horatio B.
Belcher, J. White
Breck, Nathan
Burrill, David, Jr.
Holbrook, C. S.
Holbrook, Elisha
Leeds, Joseph
Maguire, James
Maguire, James F.
Mann, Ephraim
Niles, Jacob
Stevens, Richard
Tower, Isaac
Turner, Royal W.
Turner, Seth
Wales, Apollos
Wales, Ephraim
Wales, John
Wales, Jonathan
Whitcomb, A. W.
White, Adoniram
White, Jairus
White, Jonathan

24.

ROXBURY.

Adams, Thomas
Andrews, Alfred A.
Appleton, Charles T.
Bacon, William, Jr.
Bartlett, Henry S.
Blake, S. Parkman
Bowditch, Azell
Bray, Charles F.
Brigham, Joseph L.
Bryant, Charles W.
Clarke, John J.
* Codman, Henry

Comins, Linus B.
Copeland, Benjamin F.
* Copeland, Charles
Copeland, Franklin
Cotting, Benjamin E.
Crawshaw, Joseph
Crosby, Benjamin H.
Davenport, George
Davis, Gilman
* Dearborn, Henry A. S.
Ellis, Charles
Ellis, Charles M.
Eustis, William
Fisher, Warren
Fiske, George A.
Francis, Ebenezer
French, Jonathan
French, Mrs. J.
Fuller, H. Weld
Fussell, John
Gardner, Francis
Gould, Joseph D.
Gray, Henry D.
Guild, Frederic
Guild, Henry
Guild, James
Hendee, Charles J.
Hewes, John M.
Hewins, Whiting
Hickling, Charles
Huston, William R.
Keene, James
Kidder, Frederic
King, William S.
Kingsbury, William B.
Kittredge, Alvah
Lee, Wm. Raymond
Lemist, Edwin
Lewis, Daniel
Lewis, Franklin H.
Lewis, Samuel S.
Lowell, John A.
Mann, Benjamin
Mathes, Albert R.
McBurney, Charles
McIntosh, William H.
Parker, Augustus
Parker, George J.
Pickering, Henry W.
Pike, Charles S.
Prescott, Elijah, Jr.
Putnam, Allen
Rich, Naphthali D.
Ritchie, James
Robinson, Jonathan P.
Ropes, Joseph S.
Sargent, Epes
Seaverns, F. W.
Shed, Henry P.
Simmons, David A.
Skinner, Elias
Sleeper, John S.
Stevens, Amos
Stone, Ebenezer W.
Thwing, Supply C.
Tolman, James
Trescott, Elijah, Jr.
Vinson, Cornelius M.
Walker, Samuel
Way, Samuel A.
Whiting, William (Montr. Av.)
Williams, Aaron D.
Williams, Aaron D., Jr.
Williams, David W.
Williams, Mrs. D. W.
Williams, G. Foster
Williams, George H.
Williams, N. D.
* Williams, Stedman
Wilson, George W.
Wiswall, Samuel

93.

SHARON.

Bullard, Benjamin
Drake, Asahel S.
Gay, George W.
Hewins, Elijah
Johnson, Lucas
Johnson, Otis
Lothrop, Howard A.

Mann, George R.
Mann, William R.
Morse, Harvey
Sanger, John M.
Turner, Calvin

12.

STOUGHTON.

Atherton, James
Atherton, William
Belcher, Orin
Belcher, William S.
Capen, Samuel
Clapp, Lucius
Curtis, Samuel W.
Gay, Lemuel
Goldthwait, Daniel A.
Hodges, Leonard
Hodges, Samuel W.
Littlefield, Charles
Page, Frederick A.
Porter, Luther
Porter, Robert
Southworth, Amasa
Southworth, Asahel
Southworth, Consider A.
Sumner, Francis C.
Swan, Elisha
Talbot, Newton
Tolman, Ebenezer W.
Tucker, Wales

23.

WALPOLE.

Allen, Jeremiah
Allen, Lewis
Bacon, William
Bird, Charles
Bird, Francis W.
Boyden, Horatio
Clap, Edmund W.
Clap, Warren
Clarke, Mrs. Betsey M.
Clarke, Truman
Ellis, James
* Ellis, Joseph
Gould, John A.
Gray, Smith
Guild, Charles
* Hawes, Joseph
Hyde, George B.
Lewis, Willard
Neal, Benjamin
Pierce, Shadrach S.
Plimpton, Calvin G.
Shepard, E.
Smith, Metcalf
Stone, Ebenezer
Thompson, Edwin

25.

WEST ROXBURY.

Allen, Stephen M.
Arnold, Joseph
Bacon, Daniel C.
Bacon, William B.
Bailey, Luther C.
* Balch, Joseph
Billings, Joseph H.
Billings, Mrs. J. H.
Billings, Miss Mary
Blake, William
Bond, George William
Bradford, Samuel D.
Bradish, Levi J.
Brown, Benjamin
Browne, Horace E.
Cabot, Stephen
Cass, Aaron
Cass, Francis W.
Cass, Henry W.
Curtis, Joseph H.
Dabney, Charles W., Jr.
Davis, Francis
Dixwell, John J.
Dudley, Ephraim M.
Dunn, Theodore
Gooding, George
Greenough, David S.
Hall, David P.

Head, Francis C.
Henchman, Nathaniel H.
Hewins, Charles A.
Keith, William
Lamb, Reuben A.
Lawrie, Andrew B.
Low, John J.
Mackintosh, Charles G.
March, Andrew S.
McIntosh, William
Meserve, Andrew T.
Meserve, Isaac H.
Minot, George R.
Morse, Charles
Motley, Thomas, Jr.
North, George G.
Orange, Thomas
Page, Kilby
Parkinson, John
Pratt, John C.
Prichard, Jeremiah
Richards, Edward
Russell, George R.
Sampson, Charles
Shaw, Francis G.
Smith, Joseph M.
Smith, Melancthon
Spaulding, Solomon R.
Sturgis, James
Sturgis, Russell
Swett, Samuel W.
Taft, Reed
Townsend, David
Tufts, James
Weld, Aaron D.
Weld, Mrs. A. D.
Weld, Aaron D., Jr.
Weld, Miss A. K.
Weld, Stephen M.
Westcott, Stephen
Whytal, Thomas G.
Williams, Dudley
Williams, Henry H.
Williams, Moses
Williams, Thomas B.

73.

WEYMOUTH.

Burrill, Ansel
Fifield, Noah
Howe, Appleton
Humphrey, Ebenezer
Humphrey, Lemuel
Hunt, Atherton N.
Hunt, Elias
Jones, James
Kingsbury, Fisher A.
Loud, Joseph, Jr.
Nash, Abner P.
Richards, Elias
Shaw, Nathaniel
Shaw, Theron V.
Tirrell, Albert
Tirrell, James
Tirrell, Wilson
White, James
White, Thomas

19.

WRENTHAM.

Aldrich, Artemas
Cheever, Otis G.
Clap, Harvey E.
Clay, Nehemiah
Everett, Edmund T.
Everett, Melatiah
Faxon, Francis G.
Fisher, Calvin, Jr.
Fisher, Hiram B.
Fisher, Silas P.
Ford, Peter
Fuller, Chauncy G.
Grant, George
Hawes, Benjamin
Ide, Edwin S.
Larkin, Lyman B.
Mann, Howard
Parker, E. B.
Pond, Jabez E.
Pond, Lucas
Starkey, Gardner H.

Stone, Curtis
Ware, Asa
White, James A.
24.

MEMBERS RESIDING OUT OF THE COUNTY.

De Reynoso, Bernard
Edmands, J. Wiley, Newton
Goddard, Thomas, Boston
Gould, George, Newton
Minot, George W., Boston
Sampson, George R., Boston
Slade, Robert, Boston
Smith, George W., Boston
Tappan, Lewis W., Boston
9.

Total, 1017 members.

ADDRESS,

BY

REV. F. D. HUNTINGTON.

ADDRESS.

Mr. President and Gentlemen:

When the farmers throw down the trophies of their twelvemonth's pacific campaign before the public, and so put their husbandry on exhibition, they virtually challenge a public criticism. Leaving, then, for a day, the natural privacy of their profession, they make confession of larger relationships. They acknowledge amenableness to those common standards of judgment that try the whole manhood. It will be only according to the liberties, if not indeed the rights, of the jubilee, therefore, if we hold their calling up into the light of those catholic claims imposed by the thinking and the policy, the conscience and the affections of humanity, in these times. Perhaps I may find an intimation that you prefer what suggestions are to be offered here should follow this liberal course, in the fact that you have invited a voice from outside your own regular ranks — shall I say the voice of a deserter, or an exile, or an admiring ally? — to address you.

To aid my purpose, let us take the farmer on his own domain. Let us go back and meet him on the farm. Suppose that, standing there in some interval of his work, he looks up and about him: he will very likely notice four familiar objects in his scenery — because they are the common monuments of our Puritan inheritance, and the

universal signals of our republican and New England order of life. I mean the School-house, the Town Hall, the Church, and the Homestead. Let me take these four structures as the visible symbols of four great classes of his relations to the world, which I wish to bring under your survey; and thus they shall fix the method and the limits of my address. Without threatening you either with a scientific dissertation, or a political treatise, or a sermon of theology, or a domestic lecture, I wish to represent, if I can, under these convenient types, something of the dignity of your freehold, as farmers, in our modern, American heritage of free thought, free industry, free worship, and free affections.

I. As towards the School-house just as it stands, with its various equipments for the intellectual discipline and furnishing of youth, I take it for granted every Massachusetts farmer will follow the most careful and most generous treatment. He will be its eager and unflagging patron. He will rob his own children of no portion of their rightful bounty in its sphere of noble study, by calling them off to help out the meagre force of labor at home, thus starving their brains while he fattens his mutton; inverting nature, by growing lordly sheep and sheepish boys. He will grudge no taxation that provides the best teacher that the most thorough committee can hire. He will see to it, that in its architecture, its order, its surrounding beauty, and all its apparatus and appointments of instruction, this little Smithsonian Institute of his district represents the best genius of the neighborhood, and reflects the educational wisdom of the day.

But beyond this ordinary fealty to good learning, I take the School-house as signifying also that whole contribution of science to agriculture, which is now one of the acknowledged and prime requisites of your vocation. And here my subject opens into a somewhat wider scope.

There is a rather irregular and unorganized, but on the whole progressive, *body of information*, which is called, by courtesy, the Science of Agriculture. It is gradually taking the shape and proportions, under your intelligent authors and periodicals, of other and exacter sciences. If we seize this body of knowledge precisely in its present position, and speak to its present exigency, we shall find, I suspect, that it has passed through its first stage, viz., its era of general discovery, and is now waiting for the patient hand of detailed experiment, and the organizing effects of a comprehensive induction.

I said it has passed through its first stage, or era of general discovery. The fact is, it passed through that stage so long ago, and stood still so long after, that it might reasonably have been doubted whether it ever meant to go on. If there is anything amazing in human history, I suppose it is the stationary attitude assumed by this radical employment of man, from the period of its origin in Syria, which must have been somewhere near Adam's time, down to about the present century. Consider that the race of proper ploughs — the only ploughs we should recognize as worthy the name — the basis implement of the whole business — is only about eighty years old. One apology offered for this protracted state of catalepsy, is an alleged double misfortune agriculture has had to suffer from climate — both extremes entering into a conspiracy to put it back; since the tropics ripened everything for it without the trouble of cultivation, while the frozen regions made it so much trouble to cultivate that it would not try. This explanation would answer pretty well, if nature had not happened to spread out a belt of territory round the globe, which is neither arctic nor torrid, but temperate, of very respectable dimensions, and admirably fitted for any progressive demonstrations, had our enterprising forefathers been so inclined. The simple truth

may as well be confessed at once: Our progenitors liked fighting one another better than fighting stumps and swamps. That was the world's boyhood, and, like the few boys left in our day, who are not oldish little men in short clothes, those swift and supple sinews chose the bow and spear, with the big wrestling-ground of barbarian tribes, before the civilizing but rather fatiguing pickaxe and shovel. A better excuse, I am inclined to think, though far from a sufficient one, will be found in the paradoxical circumstance, that the great advantage of agricultural pursuits has been their great hindrance. I mean the general independence they allow, as providing in themselves the necessities of living. This supersedes commerce, removes competition, and so tends to quench enterprise.

In affirming agricultural science to have passed through its epoch of general discovery, however, I referred not so much to the rude and slow advances it made for thousands of years earlier, as to the more recent period when it took a sudden start forward, and may be said to have first risen into the dignity of an intellectual concern. These discoveries moved in two directions, chemical and mechanical. Chemistry applied analysis to the whole *material* of agriculture, plants and animals and all products, as well as soils; whereas the stupidity of ages had been taking it for granted that, since all earth is earth, it matters nothing what its elements are, so the seed be under ground. Mechanism stretched out its hand, and gave the husbandman a new set of tools — a branch of the general turn for mechanical invention and elaboration that has marked the mental movement of the last hundred years. By both these agencies, not only was a new principle introduced into the *action* of agriculture, but at the same time accrued an enlargement of its spirit and motive.

Of course, at the first, chemistry did very little with her

crucible, and mechanism comparatively little with its smitheries and factories. Both have, probably, only begun their magical economics yet. But it is none the less true, that in the simple discovery of the *fact*, that chemistry, along with geology and physiology, has relations to farming, and *could be made* to help it, in the bare establishing of that *fact*, was a grander crisis in the history of this business than is likely ever to come again. So in the demonstrated feasibility of labor-saving machinery, after the wooden ploughshare and the live-stock threshing-apparatus of centuries, there was the turning of a corner, the opening of a new page, the sudden light that always breaks in with the sunrise of a fresh principle, which did more for you than perhaps can be done again. So that if it is modest ever to predicate such a thing of any interest, in a day so pregnant with wonders as ours, we might venture to declare, that the grandeurs of reformation, the cardinal revolutions, and the Lutheran age, in agriculture, are passed.

What, at any rate, is the precise direction of the efforts wanted now, and demanded of you, as farmers who, in cultivating the earth, mean to cultivate yourselves? It will be found, I suspect, that the answer to this question is as practical a theme, and as well worth your study, as any that the proprieties of to-day could possibly suggest. We hear much vaguely said of the need of enlightened farming—it has been the topic of repeated occasions like this: it is worth inquiring, where, precisely, at just this time, that light should be made to fall in.

In the first place, the posture of New England farmers as they are, exposes the need of rousing still further what may be called the spirit of the profession. It has its own rights, privileges, duties, and titles to homage. I remember, of course, how the very Festival that calls us together, the wide departments of your annual display, and especially

the spacious and convenient edifice now given up to the uses of your enterprise, with similar gatherings enlivening other counties and states in this part of the year, are proofs that this process of quickening has already begun, and goes on. But then I remember, as well, how large a numerical majority of those who are called farmers of Norfolk fail altogether to represent themselves at the Fair; how many others are present, not as competitors *in* the arena, but only as gazers at a brilliant but distant and uninstructive pageant; and how inconsiderable, if I may say so, is the number that carry away such vital impulses, or such solid ideas, as will tell on the direct management of their own acres, and their next year's seed, and crops, and stock. This living and ardent interest which turns every item in the spectacle, every colt and cow, pig and parsnip, heifer and hen, rug and rareripe, to a stimulating value, and nerves a more resolute purpose to make the most of each man's, or woman's, personal chance, — this is the sort of ambition that pushes your pursuit forward, converting it from a servile drudgery to one of the elegant arts, and winning for it heights of excellence and honor. I am afraid it must be acknowledged that intellectual apathy has been the drowsy curse that has so long somnambulized agriculture; and if it will serve to soften the accusation from an outside party, I will put the pulpit in with the plough; though who knows but if there were less dull planting, the wholesome contagion would run up the pulpit stairs, and there would be less dull preaching? Or, if it seems ungracious to press this charge just when the sleepers are waking up, I remind you, on the other hand, that these occasional signs of animation only cast the adjacent obstinacy into a more palpable disgrace. It is not that cheering signals of invigorated intelligence are not stirring the air; but that these better notions are not made to work their way out, and settle down on the actual

fields, and regenerate your daily operations. Hence, I say, what you want is, by the help of the School, some systematic means of pushing every improvement out into the mass that have not yet arisen to come in search of it.

If you will allow me to ask questions, Are there no tokens to be found among you, that some of the primary maxims of the improved husbandry are as completely disregarded as the bulletins of the Chinese rebellion? Are there no fields lying in Norfolk, this fall, whose dwarfish crops proclaim as dismally as language could, that it has not yet been found out by their owners that potatoes and turnips crave potash, that clover and peas want lime, that wheat and oats hunger for silex and phosphoric acid, just as voraciously as the Irishman in the kitchen wants the potatoes, horses the clover, or children late home from school the wheat?

Are there not certain triangular stains smirching the sides of barns under the stable-windows, left there by manure-heaps that took all weathers with no roof, which tell every passer-by that these prodigal feeders, though they locked the barn doors every night, and set traps for foxes, and sent constables after the thief that stole their apples, forgot that the atmosphere has a sly way of turning robber, as well as giver,—that the sun and rain filch as as well as fertilize,—and so did not shelter nor fasten down, by boards and muck and forest leaves and plaster, those volatile salts and gases which these noiseless marauders were snatching up into the sky,—so much gold out of their pockets? You would hardly applaud the thrift of a manufacturer that throws away a quarter of his raw material.

Are there no specimens of stock, in the yards and pastures of these towns, rawboned and diseased, and lean as the leanest kine of Pharaoh,—walking illustrations of the "anatomy of melancholy,"—which seem to show that the problem in their keeping has been reduction to the

lowest terms,—and the multiplying of exceedingly vulgar fractions of beasts,—or finding the equation between the minimum of attention and the maximum of emaciation? Is there none of this stock usurping the place, and consuming the fodder, which of right belong to cattle, that should be here in Dedham taking premiums,—stock that has been badly selected, badly crossed, badly reared,—incarnated or rather inskeletoned libels on the whole law of reproduction?

On the other hand, have you all discovered the real philosophy and economy there is in feeding your cattle on pine boards? in other words, discovered that if you put them *into* a warm stable, instead of letting them shiver on the north side of it, all the drizzly and frosty weather of winter, you thereby provide fuel for their vital sustenance which the furnace in their lungs would otherwise have to borrow from their stomachs, to keep up the temperature, at the cost of a fifth more in quantity of meal or hay? Have you acted on the false presumption that young cattle will eat up the third-rate stuff, like stalks and straw, with a better appetite, if they are not allowed anything else,—whereas the truth of their dietetics is, that they will swallow this inferior food far more easily at noon, if you lubricate their throats with a little more epicurean catering for breakfast?

Are there no dilapidated buildings, filthy front yards, staggering fences, broken tools scattered over haymows and cornbins and woodpiles, instead of hanging cleansed and polished in a tool-room,—all vile witnesses how it is forgotten that prosperity never takes the arm of a sloven?

Now these neglects seem to show that, over and above the attainments of a few scholarly persons, or rather between their science and the practical work of the multitude, there is needed a connecting link,—something to kindle in Messrs. Smith, Jones and Brown, out on the lots, an

appreciative concern for the writings and deductions of Messrs. Liebig and Norton, Hitchcock, Jackson and Harris, in their studies and laboratories. An exhibition is opened to some purpose, if an emulation is provoked by it that sends every man home from cattle-show, determined that he will be a master on his acres, and not a plantation slave driven by the whip and gong of those two tyrannical overseers, necessity and routine,—an original creator by his mind, and not the mere manual drudge of habit.

But something else is needed besides this wakening of ambition. It cannot be denied that the large accessions recently made to agricultural knowledge, fail sometimes to secure confidence and adoption among practical men, from a cause more legitimate and a little more reputable then sheer stupidity. A distrust has been created towards the recommendations of professedly scientific authorities, by a plain contradiction between the theory and the trial. You are told, perhaps, with an air of dogmatic assurance, by some book or lecturer, that by a certain tillage you may be sure of gathering eighty bushels of Indian corn, from an acre of your ground. You comply with the conditions, but gather only forty bushels of the corn. Your weekly agricultural paper extols poudrette, and advertises for the dealer. You send the money, and get the article, but not the expected profit. A theory advises you that if you will put in a subsoil plough, you will double your harvest. You try it, and harvest less than last year. The Agricultural Society recommends a new mowing-machine; you pay for it; it does not work, and lies rusting, an ugly eyesore, in the shed. These are very common experiences in all parts of the country. In each case, there is partial information, which is one form of falsehood. The dressing was applied to the wrong soil; the subsoiling was tried in the wrong place; the machine was handled in the wrong way, or had some loose screw. The pupil is deceived,

either by superficial instruction, charlatanry, or his own haste; and so book-farming falls into contempt. Both are wrong, the instruction and the contempt. Let us see why.

The main oversight of the recent efforts at improvement has been a too hasty generalization, and a deficiency in patient, painstaking, accurate records of experiment. A few brilliant announcements have dazzled our eyes; sanguine lips have trumpeted abroad spurious maxims; and the golden age of great profits and easy times has been heard knocking at the doors. Following the explosion of this sophistry is apt to come a reaction of discouragement, as unreasonable as the flattery. What the interests of your profession seem to me to be imperatively demanding just now, therefore, will be two things: 1. The most rigid and thorough experiment, as to every detail and particular of every mode of tillage, enriching and renewing of lands, breeding of stock, and new implements, taking into account all the most minute and variable conditions, data, circumstances, attending that experiment: and 2. A faithful, exact, and systematized registration of every such experiment, including specific statements as to all the particulars alluded to. This is that *second stage*, following the era of general discovery, which agricultural improvement has next to pass through; a period of thorough experiment, and scrupulous registration. Till we have the tests and tables only thus to be furnished, we have no rational induction, and of course no development of principles that will give us a proper science. The more extensive and diversified these experiments on a given question are, throughout the country, the sounder your basis for an induction. Then let these records, bearing the stamp of more precision than is common in county reports hitherto, duly and responsibly authenticated, be brought together and collated by competent hands, —

and you have got a body not of theories but of facts, — facts that will justify a broad and impregnable generalization, fit to be published, and constituting a noble contribution to substantial science.

One prime difficulty that will attend these processes will be an inadequate sense of the liability to deception. If you would meet those enemies to real advancement from which the farmer has already suffered so much, — careless statements and half-established conclusions, — you must bring into the field exact weights and measures, exact observations of climate and weather, exact attention to every element that may influence the result. Such credulous rules of evidence as suffice for tea-table gossip, or stories of table-rappings, will not answer. There must be a search for disturbing causes, not on one side only, but all sides. If the case is one pertaining to an out-door crop, like wheat for instance, consider the variety of elements you have got to watch and include in your report. There is, first, the quality, species and pedigree of the seed sown; there is the time of sowing; there is not only the composition of the soil, but its mechanical preparation, its comminution by plough and harrow, its situation as regards exposure to the sun, latitude, springs of water, and the antecedent crops taken from it; then there is the whole subject of manures, as to ingredients, condition, amount, and mode and time of application; then the direct treatment of the crop on the ground; the cost of labor; then the subtle and fugitive meteorological changes; then the relation of the growth to diseases; still further, there is the harvesting, threshing, and winnowing, — for it has lately been ascertained that wheat subjected to one of the new machines, though fair in appearance, loses somehow a portion of its germinating, or reproductive power; and finally, not only the measurement but the weight of the yield, — for, as you know, wheat of the same apparent plumpness

ranges over a difference of five or ten pounds' weight to the bushel. Now, it is not till you have brought into your registration each of these twenty-three specifications that you can be said to have furnished returns of this crop of wheat. There is not one of them, which a thoroughbred scientific manipulator, if the case were transferred to the laboratory, would not despise himself for leaving out.

The same necessity for thoroughness exists in all other branches of the business. When you take up a lump of premium butter, you have hold of what seems to be a very simple, home-made fact, and a very pleasant one. But this fact has an antecedent biography, — and before the oily cake has slipped through your fingers, or elsewhere, if you are a good farmer, and a good Yankee, you have at least a dozen questions to ask about it, — how the fact has come to be, — all the way from the cow and the cow's mother, and grandparents, on to the toast. You want a written natural history of this lump, *ab ovo usque ad malum.*

Nor is farming singular, in this respect, among the sciences. Look at the nicety of astronomical calculations. Look at the minute mixtures of the chemist. Look at the hair-balances, and tests of exquisite delicacy, in every philosophical apparatus. Observe the almost awful precision exacted in clinical surgery. Furnish a Herschell's discoveries without the achromatic lens and infallible mountings of his telescope and siderial clock, with the horizontal and vertical adjustments of transit instruments, air-bubble and spider-lines; conceive of a Bergman's or Faraday's analyses, without atomic weights and unimpeachable tables and mathematical proportions, and you may expect a perfectly intelligent agriculture, without this sharp inspection, and these unquestionable statistics. Why should you desire exemption from them? They are what invest your calling with its lasting interest, — its intellectual

charm. They furnish the sort of fascination that is likely to pique and attract the curiosity of bright young men. I can even imagine a man's having his sleep broken, his pulse accelerated, and his nerves in tension, while he watches for the impending result of one of these elaborate and exciting experiments, like the issue of some well-matched game.

I have spoken of the need of these tentative processes. I appeal to your own experience. There are few of that more progressive class of farmers that form societies, and arrange exhibitions, like this, who have not some time been victims of crude statements. Indeed, it is quite extraordinary how many of what are now the prominent subjects, most interesting and most discussed, relating to practical husbandry, remain from year to year open and undecided questions, with about as much said on one side as the other; when nothing is wanted but trials enough and attention enough, to settle them peremptorily. In Massachusetts alone, there are farmers enough at work, if they would continue their observations, to determine any of them in two seasons. Make what allowance you will for that wide margin of uncertainty that always hangs about a business so dependent on seasons and weather, still, I say, Nature, reverentially and resolutely studied, never cheats her disciples. Find her laws, and, rely upon it, they never will miscarry. You have only to talk with your neighbors, or turn over the files of any agricultural journal, to find examples of what I refer to. What universal rules have been established, for instance, as to the mode of applying manures? Yet why should there not be rules, for all cases, as much as for the silversmith in mingling metals, or the apothecary drugs? Subsoiling has been preached for some five years past, both here and in England, as the Columbus discovery of modern tillage, revealing to every farmer a new territory underneath his

cultivated one; you are pointed to Lord John Russell's turnips, and the Rackheath wheat. But does the practice actually apply as well to New England as Old? Is there an offset to its benefits in later crops and more exposure to frost? What are its relations to under-drainage? Does it relieve wet lands, or render them more hopelessly soaked and spongy? Is it equally good for a dry, friable soil on a sand-hill, as I have seen to be true in one case, or is it any better than the common deep ploughing as they practise it in Surrey and some parts of Yorkshire? Now what I affirm is, that each of these queries ought to have one, definite, indisputable, experimental answer, recorded where it can be got at; an answer put beyond the region of conjecture, and rooted in authenticated facts.

Again, of the application of lime, the preconceptions of chemical theory would seem to promise that it belongs only to non-calcareous soils; yet does not experience show instances where a calcareous soil has been specially fertilized by carbonate of lime? And if so, what are the conditions that generate the anomalous result?

Again, within two months, I have seen in a single number of a popular agricultural periodical, two communications, both in a very positive tone, taking precisely opposite grounds on the question whether, in salting hay, the salt may be thrown on the top of the mow and left to interpenetrate the mass, or must be cast into each separate forkful, or layer, as the hay is pitched from the cart.

Again, the Deerfield farmers, in this State, close by the celebrated residence of Henry Colman too, dispute one another to this day as to the value of the "old tore" to a grass crop, some of them insisting that it helps the next yield, and others that it is better to keep the sward close.

Or, once more, what is the right law of producing fertilizing agents? Must we continue the old fashion of

spending the winter in feeding out all that we spend the summer in gathering in, copying the circle of the snake that swallows his tail, or is there some better way? And will more be gained by following the famous aphorism of the Earl of Leicester, "The more meat a ploughing farmer sends to Smithfield, the more corn he may sell at Mark Lane," or by raising young cattle?

Now what may be asserted of each of these mooted points is, not that every one of you may not have an opinion upon it, and be very sure he is right; but that his next door neighbor is likely to have an opposite opinion; whereas, both being reducible by experiment to fact, there ought to be, not opinions, but knowledge. The conditions of a given result ought to be as clearly determined as the oxidation in electro-magnetic machinery, combustion under a steam engine, or the proportions of chlorine and hydrogen in thirty-seven pounds of muriatic acid. In looking over the several reports of the county societies for the last year, I see complaints on half the pages of non-compliance with the rules of the committees in reference to accurate returns. One reason, I suppose, is, that a farmer begins the season with no idea of competing, and therefore keeps no record; but unexpectedly finding Nature has favored him with a remarkable product, he takes it to exhibition, hoping his blunder will not forfeit his chance. This suggests whether it would not be well worth while, not only to withhold the premium on account of the omission, but to establish a separate prize for the best method and most accurate specimen, in reporting the whole internal history and transactions of the husbandry of the year.

What the school-house is saying to the farmer, therefore, as the voice of the age in behalf of his science, is: While you are never to be afraid to think, and never to stop that study which is both the pabulum and gymna-

sium of the thinking faculty, — be specially true to this second stage of agricultural advancement, — the stage of patient, various experiment, and exact registration. Hold up steady lights over your own path, and your children's. Remember the distinction between theory and science. Theory infers from a single fact, or a few facts, and fills out the deficit with a guess. Science requires a broader base for its induction, and facts enough to justify the affirmation of a law. What we want to come at, in Nature, are her laws, not stopping with sporadic and fragmentary phenomena. What we want of the separate phenomena, is to marshal and compare them, and so make them ancillary to conclusions. Interrogate Nature, then. Besiege her with all manner of curiosity. Pound, and push, and caress, and entreat, and importune her, till you wrench her secret from her bosom. It is to incite our faculties, that obscurity veils so many of her treasures.

To this end, that he may be his own professor, scholar, secretary, and reporter, let every farmer have as complete an apparatus as he can afford, for conducting his examinations, and nice admeasurements. Then let him enter his daily record, with special respect for arithmetic. Let him keep a running debt and credit account with every acre of his land, as much as with his blacksmith and grocer, and post his books. This will sharpen his wits, double his relish, and shed a steady intellectual irradiation through his whole employment.

Then, in addition, there ought to be some national publication, emanating from an agricultural department in the government, where nothing should be included but reliable results, collected from the entire survey of facts, somewhat like the Philosophical Transactions of a Royal Academy, only made up more directly from the sources of practical life.

I must not leave speaking of the relation of the farmer

to the School-house without asking why agriculture, besides making the most of all existing forms of education from the primary school to the college, — and there certainly ought to be no further delay, it seems to me, in introducing into the higher classes of our rural district schools some succinct and lucid text-book, like that of Professor Nash, for example, — but, *besides* that, why agriculture may not have a larger school-house, *i. e.*, a college, of its own. It will be a striking case of forbearance, or something worse, gentlemen, if the grand staple business and fundamental occupation of this country is content much longer, without endowed and furnished institutions for training young men up to the highest pitch of agricultural accomplishment possible to the age. When it can be shown how the art of destroying men's lives is nobler than the art that saves them, or havoc and slaughter are better than peaceful production, then the government may be able to apologize for not giving agriculture a West Point, as well as war, and for not representing the soil in the Cabinet. The national policy of maintaining a Central Bureau for the army and navy, with none for husbandry, is much like a man's expending so much on a choice collection of pistols and poisons, that he has nothing left for good meat and flour.

Of the question, whether a thorough agricultural education can be got to the best advantage on a private farm, or at some public seminary, there is undoubtedly much to be said on both sides. Probably the true method will be very much like the usual preparation for the professions of law and medicine, where a part of the course is taken among the lectures, and libraries, and cabinets of a university, and the remainder among the usages of the office. For mastering the science proper, the student will need such resources as few private citizens can afford; but he must also handle the tools. Without the first, he will be

an empiric; without the last, an awkward visionary. In the former case, his hands may be brown, and his face crimson; but in the latter, his fingers will be white, and his whole management of a decided green.

Whatever great achievements have been reached in any field of thought have owed their finest impulses to an educated class, minds trained by special opportunities, some "sacred band," whose learning has quickened the ambition of the mass, and raised the intellectual tone to their own level. In the air that circulates through New England, no man's position is so humble as to forbid his aspiring to be one of that order of nobility. It is for the common interest, at least, to provide means to multiply it. If the inherent passion for excellence in what you undertake, if a love of perfection for its own beautiful sake, if an honorable professional pride, will not compel these energetic reforms, then let that lower motive, which instigates you to take off from each acre, every year, more dollars than you put on.

This lightening labor, or increasing the proceeds of labor, which amounts to the same thing, is not the attempt of idlers to shirk their task. It has a better justification. Take facts as they stand. Why do your young men run, as by some universal instinct, from the farm, where they were born, to the city, where they so often learn to wish they had not been born anywhere? Chiefly — whatever explanation they may put forward as having a handsomer look — chiefly because on the farm there is supposed to be an inevitable doom to hard, monotonous, wearing bodily toil, from daylight to sundown, life through, with no room for mental expansion, or generous tastes, or social recreation; and, secondly, because, after all this labor, the farmer makes too little money. Nor will my faith in young men's natures suffer me to believe this is always a sordid calculation with them. For, in thinking of money, they

think of it oftener as a means than an end. They want it for what it brings. On the farm, very frequently, are rooms without books, walls without pictures, manners without grace, clothes without fitness, and grounds without shaping or decoration. On the contrary, the city merchant buys a library and works of art, sends his children to schools where they learn to move with elegance as well as to cipher and parse, gets garments that are finer and fit, and is not so exhausted physically at nightfall as to prefer sleep to any company or book. He comes back into the country, and lays out a beautiful estate, sometimes with statelier animals, and selecter fruits, and tidier fences and hedges, and more blooming gardens on it, than his neighbor, who has all the while been staying there and making farming the business of his life. Now, it would be a hard task in persuasion to convince most young men that these things are not good, not desirable, and that the dollars which command them are not of the nature of an advantage. I confess I should be a bad subject for such persuasion myself. Besides, these things are all of the nature of picture-work; the boy cannot help seeing them; they work upon him while he stops on his way from pasture under the fragrant shrubbery, or peeps through the pickets at the mellow peaches and pears.

I know perfectly how apt his sanguine blood, and his ignorance of the ninety-odd failures in a city for every single success, are to put a fallacy into his plans and cheat his choice. But none the less is it true, what he goes to the city for is a chance, though but a chance, for certain means of refinement, liberality, and width in the whole style of life, such as scarcely a mere farmer about him, in the old way of farming, has displayed. Who ever knew a confident and chivalrous youth to doubt he should be one of the five that succeed, though five hundred fail? And, moreover, many young men at that aspiring period of life,

before the charm and glory of early ideals have faded off, thirst honestly for more stimulus to mental action, more enlarging ministries to thought, than they have found in rural places. This they dream of finding in the pressure of crowds and the sharp collisions of traffic. Perhaps they dream delusions; but this is the feeling. Depend upon it, if you would hold your sons and brothers back from roaming away into the perilous centres, you must steadily make three attempts — to abate the taskwork of farming, to raise maximum crops and profits, and to surround your work with the exhilarations of intellectual progress. You must elevate the whole spirit of your vocation, for your vocation's sake, till no other can outstrip it in what most adorns and strengthens a civilized state.

II. I have intentionally used so much space for the scholarly aspects of your profession, gentlemen, that I have left very little for the other three objects in the farmer's outlook, — the Town-hall, the Church, and the Homestead. I shall only touch each briefly, in the way of suggestion. The Town-hall I take as the symbol of your relations to the social compact, the body politic, or by whatever other name you may choose to describe the powers and functions of civil government. And when we have gone to the bottom of the matter, whether by the way of philosophy or Christianity, we shall find that the fundamental idea of politics is mutual protection and friendly intercourse. I do not say of feudal, or partisan, or aristocratic, or imperial politics,—for the law of *their* life has too manifestly been mutual repulsion and aggression; but of the true, ultimate, divine politics. Not to hold each other back, and pull each other down, and rob, and stab, but to confederate for the common good, and to complete an economy of universal growth, by means of equal labor, whereof all shall take the benefit, — this is the real and providential office, whether of separate empires or of the several inter-

ests under the same administration. Hence it follows that you serve the cause of good government when you do two things, — when you perfect your own business as one of the great productive forces which feed and cover humanity, — and when you bring that calling into amity and reciprocity with other callings. Unless God fails to furnish a law for his children in his own love, the right political state for mankind is the state of brotherhood. The same law holds of trades, handicrafts, professions, as of persons. These pursuits enter into their "holy alliance," when they harmonize the two aims, to improve themselves and help one another. While men and women are good Samaritans, it certainly was not meant that their doings should be priests and levites, or pirates and robbers. The commonwealth is not served, till the different branches of industry merge their jealousies in good-will. You read this law in the beautiful balancings, and musical accord, in which the Divine Spirit has attuned his creation. The very lands you daily traverse and handle, preach the right doctrine of politics. Animal, vegetable, mineral kingdoms support one another. Sun and water, vapor and vegetation, earth and clouds, are ever friendly and hospitable; they are perpetually running on some missionary errand in each other's behalf; their bureau of benevolence is older than the Holy College. And so it happens that no class of men are so well fitted as you, to re-stamp this divine intention on civil institutions and public laws. If there is any order that can be looked to, to pull off disguises from selfish demagogues, — voting greediness and falsehood out of office, and single-hearted patriotism in, — it must be your own order, — the order of Christian chivalry, whose knights errant are the men that "conquer all hard weather," whose martial music is the rustle of corn, and the stroke of flails, — who give you, instead of coats of arms, arms with the coats thrown off, and for banners sheaves of grain.

Never turn your backs, farmers, on the Town-hall. Never lose a vote. Take a lesson from your own craft. Try a political candidate by his back-bone. Give the crafty and supple dodger the outside row. Treat the drones as the bees do. Understand the men that are *set up* for office, and if they are not true men who can show you an honest eye, and a brave conscience, take care to set them gently down again. See that agriculture gets as much honor from legislatures as institutions that are more showy and talkative. Read state papers and public debates. Avoid that wasteful economy which shortens the post-office bill, to lengthen the lawyer's. In these times, an agricultural people may know public men, and the true bearings of public events, as well as the busy throngs that trample pavements. There is no genuine reform that is not on the farmer's side, and he is bound to be a reformer of the constructive kind. Respect for law is instilled into him by the benignant regularity of seed-time and harvest. He wants no bullets nor hoofs of war in his meadows and nurseries, and no war-taxation thrusting its bloody fingers into his pocket. Reserve your destructive enginery for the weeds and caterpillars. He is exhorted to temperance by all the intimacy of his habits with nature. Commerce is his common carrier, and asks his protection. Manufactures and metropolis are his market; the jealousy that would cripple them wrongs himself. And all his life, the free winds and open sky over his head nurse in him that vigorous loyalty to republican liberty, that sympathy for the struggles of freedom everywhere, and that intense and rooted abhorrence of all slavery and despotism, which are the birthright of his blood, the instinct of his calling, and the inspiration of his soul.

III. By this public spirit, by disinterested patriotism, and a faithful conscience towards human welfare, the farmer will already have begun to feel holier ties attracting

him to citizenship in the kingdom of heaven. It is by divine right that the church spire overtops all the structures that men's hands build, and hallows the landscape with its aspiration. Handling God's workmanship every hour, and treading his solemn temple-floor at every step, an unbelieving farmer is in some manner guilty of perpetual sacrilege. If any man's daily task puts him close to the eternal secrets of the universe, and into communion with the awful hiding-places of Almighty power, it is his. If any man is instructed in a creed that is at once devout and charitable, a piety at once reverential Christ-ward and generous man-ward, it is he. The deeper shame to all his manly sense, if he is not touched with the religiousness of his august surroundings, and if he does not blend worship with his work. Nature may not reverse her order, nor unbar her everlasting ordinations, to dispel the illusions of his unrighteous prosperity with a miracle; but none the less does she carry the scourge in her hand, and keep her eye on him till his time.

Christianity is the patron of his labor, and ever has been. While she was shut up in monasteries, it is true she had no chance to breathe on him her benediction. But the moment she was let free from the bondages of that false guardianship, and walked forth in the immortal beauty of her freedom and love, she spoke graciously to the toilsman, and exalted labor. Again the common people heard the Master gladly. The Protestant reformation was the charter of emancipated handicrafts as well as the Pentecost of a free church. It stretched its hand over the tilled fields of Northern Europe, and industry woke to a new and nobler life. Thenceforth Christian literature spoke in honor of agriculture, not with the effeminate sentiment, the dainty rhetoric, and patronizing pastorals of Pagan classics. Virgil and Theocritus did not know how to glorify work in its influence on character.

It was only under Revelation, that the dignity which heathendom had accorded to hands red with human blood began to be transferred to hands stained with the soil. But ever since the ladder of light sprang from beside the Patriarch's head in the stony pasture of Bethel, the Bible has striven to show the husbandman that all his fields open upward into heaven.

Our believing ancestry knew what the corner-stone of civilization is. Learn from them, that your acres will lie in the light of the Father's smile, only as they lie unprofaned in the light of Sabbath mornings, only as the church bell rings over their still glebe and resting "cattle on a thousand hills," only as you and your children go reverently up from them to the confessions of the sanctuary. Your waving grain, and ripening corn, and growing herds, will never wear such beauty, as when you pass them on your grateful way to the courts of praise. Make the growing wealth of your better industry to adorn and enlarge the outward temples of the Living God. The temple will react with thousand-fold benefactions on your husbandry and your heart. Let your devotions take sincerity from your earnest life. Let your creed take largeness from the catholicity of your out-door and heaven-arched employments. The school-house, the farm-house, the town-house, may well bend in homage to the meeting-house. For learning without faith is but ambitious discontent; and government without Christianity is power without principle; and home without the beatitudes is only an animal's stall and bed, with no sacred joy and no spiritual peace. Besides, are there not acres among all your fields, where the only growths are gravestones and mounds, and the flowers planted by mourning love; where the only seed-time is that ordained by the sad necessity, "That which thou sowest is not quickened except it die;" and whose only "harvest is at the end of the world?" At that

gate of the valley you will want a warmer and surer faith than Nature and her unpitying skies reveal; another promise of immortality than the poor prophesying of the worm and the chrysalis. You will want a Gospel, a Nazareth, a Calvary. And so you will go forth from your home, and pass the school-house and the town-house by, and enter in with grateful hope at the church door, on the village green, and bend towards the altar.

IV. If now, finally, we go back with him from all these exterior liabilities to his own premises again, we shall hardly need, by this time, to memorialize the farmer of what is required of him in his house. If the school has disciplined his thinking faculty and refined his taste, if the town-meeting has waked in him the exalting sense of citizenship, if the church has lifted his heart into communion with the Father of all families, and inspired his conscience by the prophecy of life eternal, he will scarcely be content to live a drivelling dullard at home, to play the selfish tyrant in the little political economy of kitchen and parlor, or to be worse than an infidel by providing not for his own. By derivation, the significance of your common title, *husband*-man, holds you to something. Husbandmen, I suppose, are not bachelor-men. Our agricultural college, when it is established, will have to find some more consistent style for its diplomâ than *Bachelor* of *Husbandry*. Now, as Nature has done her part towards furnishing a husbandman, by making you a man, she seems to presume you will finish the business by making yourself a husband. And when you have done that initial duty, it will remain for you to take off the edge of two satires I have heard flung at married people, doubtless by some malignant critic, who, on being asked what matrimony was like, said it was "going home by daylight, after courtship's masquerade," — and then, what married life was, that it was "matrimony doing penance." Give him the lie.

Husband is *house-band*, or organizer of household life. Organize it not only by the sterling, homebred, domestic moralities, but by the binding charm of those thousand amenities that distinguish a cultured home from a barbarian's hut. The delicate angel of the beautiful knocks at your doors, and begs admission, as well as the strong angel of the useful. Is there the fine eloquence of order, is there the disposing touch of taste, is there the simple and just adorning of nature, round all your doorstones, in all your front lawns, on the walls, and tables, and furnishing of your dwellings? How many hours of a spring morning would it take to embower your windows with all that is graceful in green foliage, and winning in floral splendor? Plant trees before you purchase Venetian blinds and painted pickets. You will carry a tenderer and therefore a manlier heart in your breast all day, if you pass out of a genial circle, through the fragrance of lilies, and roses, and honeysuckles. See that the sons and daughters are interlaced by bands more spiritual than gregarious bipeds. Let the harmonies of evening music weave their souls into some gentle and lofty sympathies, — gaining the boys over from ruder pleasures and doubtful companionships by the pre-occupying satisfactions of a cheerful, and courteous, and hospitable fireside. Starve your palate, if need ever were for such denial, to stock the library. Raise the tone of farm-house table-talk, if you can, — and let the ladies help, — above stale gossip, commonplaces of the day's work, and scandalous tattle. Hang the proceeds of your premiums at cattle-show on the walls, not in battle scenes or daubed millinery, but in the shadings of some pleading picture that reflects a glorious idea, or a heroic sacrifice. Household life is not to unfold into grace and moral loveliness by accident, any more than the wealth of your orchard and garden. It must be cultivated. And I take it Christianity speaks of that higher kind of economy, as much as of

butcher's meat and breadstuffs, when it pronounces him that provideth not for his own worse than an infidel.

Gentlemen, your patience has let me lead you through this round of your relations, to school-house, town-hall, church and homestead, — in unworthy fulfilment of my humble part in this day's varied and cheerful entertainments. When I could not show you illustrious oxen, nor aristocratic poultry, nor even an astonishing cheese, you have kindly condescended to let me try in another way, and do as I could by showing what is in my heart towards your work. If I have seemed to judge your calling by too strict a standard, I insist that I thus pay it only the profounder compliment. By my love for it, I am jealous that it realize its inherent and providential grandeur. To brave natures, nothing is so exhilarating as an aim that strains the sinews. Everything, in these times, demands that our manhood, trained in whatever school, be made up on a scale of magnanimous proportions. Everything threatens and scorns a contracted culture, a stationary policy, and an inactive brain. But beyond the common appeal uttered to all modern men alike, it is for you to build up a character that is distinctively professional. Show the world examples that will bear inspection,—let who will be the judges,—of the agricultural type of manhood. Boast nothing, but *be* so much that boasting shall be excluded. If it be true, that your class is now on the eve of vaster achievements than have ever marked its progress yet, these furtherances are to come only through the intellectual wakefulness, the moral sincerity, the domestic virtue, the religious wholeheartedness of you, its most favored members.

REPORTS.

REPORT OF THE PRESIDENT AND SECRETARY.

To the Secretary of the Board of Agriculture.

Sir: — In obedience to the Laws of the Commonwealth, the President and Secretary of the Norfolk Agricultural Society herewith make return of the doings and expenditures of said Society for the year 1853.

The year has been favorable to the business of Agriculture, in this county, and the amount of sunshine and rain, heat and cold, has been proportioned to the interests and welfare of Agriculture. Our Society has made advances in skill, energy, liberality and in numbers, and similar efforts and spirit will not only insure her present position, but rapidly elevate it to a still higher rank in the scale of her sister societies.

Two hundred additional members have, within the last year, paid the fee of five dollars, and been joined to the Society; the grounds originally purchased for the Society's exhibitions, have been improved, and the number of pens and conveniences multiplied, as the following extract from the speech of the President, on opening the religious services at the church on the day of the Annual Exhibition, will show.

"Ladies and Gentlemen of the Society, and Friends of Agriculture: — The revolving year has completed another period in our history, and assembled us to celebrate the Fifth Anniversary of the Norfolk Agricultural Society.

"While I regret the inauspicious state of the weather, I am happy to congratulate you on our personal prosperity, and on the progress of the Society. 'Our land has not cried against us, nor have the furrows thereof complained;' but Spring has sown, Summer has ripened, and Autumn has garnered a bountiful harvest. Nature, from her storehouse of plenty, has poured around us blessings in rich variety and abundance, thus rewarding the husbandman and blessing all the rural industries of life; 'for the profit of the field is for *all*, and the king himself is served by it.'

"It is suitable that we should meet in this consecrated place, grate-

fully to acknowledge the Divine goodness, and to rejoice in the triumphs of science and art, so wonderfully displayed in our age, remarkable not only for enterprise and invention, but for combined and vigorous action; an age, too, when no friend of the cause of human advancement is permitted to loiter by the wayside, or to put his hands to the plough and look back.

"To this progressive principle the Norfolk Agricultural Society owes its existence. It was the spirit in which it was born and nurtured — the spirit which animates and sustains its manhood — which has controlled all its movements — which has sustained its present prosperity, and established it on a permanent and honorable foundation.

"Within the short period of five years it has acquired funds to purchase the grounds on which its Shows have heretofore been held; has paid for the structures and other accommodations for the stocks on exhibition; and the present year has erected an Agricultural Hall, a building one hundred and thirty feet in length, fifty-five in width, and twenty-eight in height. This edifice is pronounced by competent judges firm and durable. It is of good architectural proportions and external finish, and contains on the lower floor an exhibition room and offices; and on the upper floor, a spacious dining and audience hall, sufficient to accommodate at its tables more than one thousand persons.

"The whole expense of this edifice, its furniture, the ground on which it stands, with its enclosures, will not fall much short of four thousand dollars. Of the sum necessary to meet this expenditure, about fifteen hundred dollars will be appropriated from the sale of the Society's bank stock; which, with the liberal donations of sundry gentlemen, and the receipts from the Ladies' Fair, and tickets of admission, it is confidently anticipated, will come within a few hundred dollars of covering the whole expense.

"For the increase of its funds, the Society is indebted, among its donors, to Messrs. Samuel D. Bradford, John A. Lowell, J. Wiley Edmands, Robert C. Hooper, George R. Russell, and Robert Roberts, in sums of fifty to two hundred dollars each, and for smaller amounts to various other gentlemen, and also ladies. Also, to new members for admission fees, of which there have been added nearly two hundred the present year, giving as a total 1000 names on the roll of the Society."

As intimated in the above address, the weather on both days of the exhibition, was extremely unpropitious. A rain storm at that season of the year cannot but operate most fatally to exhibitions of Stock. The imported animals which are the pride of their owners, cannot be forced out to endure the chilling winds and rains of Au-

tumn, and such Stock as may be provided by the devotion and public spirit of individuals, on such occasions, suffer in appearance, and shrinking into the corners of the pen, exhibit a melancholy contrast to the stately forms and well-dressed exteriors of animals as they expand under the genial influences of a fair day. The exhibition of Stock, therefore, was less extensive and gratifying than on the previous year, but the cause is so obvious, that nothing more need be said on the subject.

The Swine, whose bald and unbristled forms seemed to welcome and defy the storm, were as fine a specimen of their race as any which have been exhibited on previous occasions.

There was less Poultry than usual, owing to the decline of what has so generally been called the "Hen Fever" in this vicinity.

The fowl speculators and connoisseurs have lost something of that ardor and fanaticism that was awakened by those extraordinary prices which served for a time to illustrate the folly of the day, and of mankind.

The display of Vegetables was more extensive and creditable than at any previous Show, except the first. Messrs. Copeland of Milton, Wilder of Dorchester, French of Braintree, Weld of Roxbury, and others, exhibited a great variety of specimens of large growth and abundant yield. The Vegetables of Mr. French have generally, for several years, surpassed all others in size, but owing to the extraordinary richness of the beds on which they are grown, (too rich, we believe,) they do not have that smooth and comely appearance which is so attractive in others. The Ladies' fair, by which a considerable sum of money was raised for the benefit of the Society, together with other subjects, is alluded to in the remarks of the President, copied above. The Address with which this volume opens, delivered by the Rev. Mr. Huntington, before the Society, proved highly satisfactory, and is eminently worthy the attention of all who desire to act well their part in the affairs of the town or Commonwealth.

A list of the premiums awarded, and the Treasurer's Report, will afford a full insight into the active operations of the Society.

We will add, as an encouragement to other societies, that the future of the Norfolk Society appears to us unclouded, and that nothing is clearer than that the earnest and active efforts of intel-

ligent men in the cause of Agriculture cannot fail to be responded to by the people, and to result in the increased prosperity and general happiness of the community.

Respectfully, your obedient servants.

MARSHALL P. WILDER, *President.*

EDWARD L. KEYES, *Secretary.*

REPORT ON FARMS.

The Committee have been invited to visit but a single farm during the past year, — that of the Hon. B. V. French, of Braintree. To describe this farm minutely and render a statement, in detail, of its cultivation, its products, its improvements, and their cost, is not, at this time, in our power. Indeed this can be done only by the respected occupant of the farm, himself. Our visit, occupying the greater part of a bright summer's day, was entirely devoted to a view of improvements, made and in progress, which are, at once, upon a grand scale and of thorough workmanship — producing, where finished, results of rare beauty and utility.

Whoever wishes to see one of the best examples, in our County, of deep and thorough ploughing, trenching, and draining, or to understand the benefit of the practical application of science to labor, so as to give the highest culture and most attractive finish to a once hard, rough and rocky soil, — whoever is curious to know how immense bodies of granite can be expeditiously removed, and converted into massive, durable, and well-finished walls, or laid as covering for drains beneath the surface ; or to ascertain how unsightly and noxious bogs, and well-nigh worthless swamps and meadows can best be turned into smooth and fertile grass-fields, or prolific cranberry-beds; or how a barren, sandy hill-side can be covered with nutritious food for cattle, — whoever would gratify his love of horticulture, and feast his eye and his palate upon delicious fruits and beautiful flowers ; — whoever asks if it be possible that a farm of little promise and many disheartening features can ever be made a scene of beauty, pleasant to behold, easy to cultivate, remunerative of labor and satisfactory in its whole results, let him go with your Committee when next they are invited to visit this noble farm.

Observation afforded us ample proof that here was systematic, intelligent labor, under careful oversight and superintendence ; of liberal outlay for desired results; of generous confidence in the laborer, and care for his comfort and improvement ; — and in return, of sympathy with the employer and a readiness to meet all his

wishes; and of a daily record of operations and results, kept with business-like minuteness and accuracy, showing at once the cost and receipts, the products and improvements of the farm. Of the different classes of stock, we saw choice breeds of Oxen, Cows, Horses and Swine, which had been selected with the greatest care and preserved with unsparing attention to their comfort, nourishment and growth. The farm buildings are all contrived for *use*, — the most convenient and economical use, — with no expense for mere ornament and show. In the barns and the sties, cattle and swine are at home, and enjoy all the comforts of a proper home. In the house, are apartments for the laborers, provided with every requisite for their ease and enjoyment. A well warmed and lighted reading-room, furnished with many papers of the day, and with books of scientific and general information, invites them to spend their evenings there; while, in another apartment, a large and well-selected library, containing many of the best Agricultural publications, discovers the resort of the employer for that information which enables him so skilfully to direct the operations of the farm.

That the outlay and income of such a farm would more than balance each other, — if indeed so favorable a result as this were produced, — we should not expect in the hands of most farmers. That it is profitable, under its present management, we have no good reason to doubt. But were it not so, we should still account the cultivator of such a farm a public benefactor. A knowledge of his modes of operation and their results would be a public benefit; and the imitation of his example, with judicious reference to the different circumstances in which it may be applied, would be a source of individual and public wealth and happiness. There are, besides the actual returns in dollars and cents, by which most men do, and perhaps ought, to estimate the present value of their lands, the satisfactions arising from the successful accomplishment of one's plans, bringing health and cheer; from the knowledge of superior means of support and comfort afforded one's laborers; from the sight of valuable and permanent improvements made, by which others, if not one's self, will reap large benefit; — stone walls that are built for ages, and in the construction of which it is difficult to imagine further improvement; — waste or almost worthless lands reclaimed and rendered bountifully productive; — trees planted, from which generations are to pluck the choicest fruit; — and the whole farm made

beautiful by skill and culture. There is in these facts much to compensate any failure of remuneration in hard money, if such failure ensues. Then, too, in the case of Mr. French, there is another and higher satisfaction, the worth of which is understood by every mind possessed of right sensibilities. He cultivates and adorns, improves and preserves his *paternal acres;* — the spot which was his early home, and is now endeared to him, beyond all others, by associations and remembrances of the purest and most inspiring sort! Who would not wish to preserve the soil, on which his fathers trod and toiled, where his own first breath was drawn, from passing into stranger-hands? Who would not cheerfully labor through years of hardest business life, for means to be expended in reclaiming and enriching, in preserving and adorning the place, which shall go down, with his ancestral name, to future generations? Who would not love to be the benefactor of his own and his parents' neighbors and friends, while he lives, and to mingle his ashes with theirs, when he dies?

In this utilitarian age and community, such remarks as these may to most men appear absurd. Yet would we think it none the less our duty, in attempting to further the ends of an association like our own, to speak of such motives and encouragements to the farmer; to inculcate a high regard for the better sentiments and sensibilities of our nature; and to hold forth to the young the idea that there is something, besides *money-making*, to be estimated in the plan of one's life; — that there are more enduring and satisfying riches than the "golden ore," and that such riches lie within the reach of every honest and true hearted laborer on the soil.

The following are the crops cultivated by Mr. French, the past season.

TILLED LAND.

Two acres Peas.
Two and a half acres Flat Turnips.
One half acre Sweet Corn.
One half acre Squashes.
One and one half acres Mangel Wurtzel and Blood Beets.
Two acres Onions.

One quarter acre Parsnips.
One half acre Rutabaga.
Four acres Cabbages.
Four and a half acres Potatoes.
One half acre Tomatoes.
Two acres Carrots.
Two acres Fodder Corn.
Two acres miscellaneous matters in the Garden.
Total, twenty-five acres.

We commend the example of Mr. French to the young and aspiring farmers of our County; and, referring for more minute information, respecting his farm, to the statement hereto appended, we unanimously award to him the first premium of $25.00.

We cannot close this report, which, for want of time, must necessarily be meagre and brief, without bringing to notice several facts, suggestive of means to render our farms more productive and profitable, and therefore, in our opinion, worthy of record.

USE OF GUANO.

The question is frequently asked, "if Guano, at the cost of fifty dollars per ton, can be profitably used on our soil;" and also, "if the benefit, where it is at all apparent, is not entirely exhausted by the crop which it first nourishes." In reply, we have to state that a farmer in this County, while yet doubtful of its value as a lasting fertilizer, made with it the following experiments:

A piece of grass land, which, for several years, had yielded only small return for mowing, was carefully turned up with a large grass plough, about the last week in August, stirring the soil to the depth of eight inches. It was then rolled with a Stone roller and laid level. This operation was followed by using twice the large square harrow. Peruvian Guano, of more than ordinary excellence, mixed thoroughly with coarse sand, — in order to spread it more evenly, — was then spread, with the hand, at the rate of 350 pounds per acre. The Cultivator was now drawn over it lengthwise and across it. The

grass seed then was sown, at the rate of five pecks Redtop and ten quarts Herdsgrass per acre. This was followed by the Brush harrow, and the whole piece was left perfectly clean and level. The soil varied, in different parts of the field, from a light, gravelly, to a deep, moist loam. The seed germinated quickly and covered the surface, before winter, with a good body of grass. This was not much injured by the severity of winter's frost, except in a few low spots. With the return of spring the grass grew rapidly, vigorously and evenly. The first return of hay was quite two tons to the acre; — the year following the yield was larger; and for four succeeding years, it has been, at no time, less than one and a half tons to the acre, with no other manure, during the time, than two light dressings of Compost.

This field was distant from the farmer's barn nearly a quarter of a mile, and he believes it would have cost more time, labor and money, to have drawn and applied manure from his barn, sufficient for the first outlay, than did the whole quantity of Guano and the subsequent dressings of Compost require.

To confirm this statement, he adds, that a second trial was made, next year, on an adjoining piece of mainly similar land and with equally beneficial results. Here the effect of the Guano is yet seen, after four years' cropping, in the earlier greenness and growth of the grass, both before and after mowing, compared with that on an adjoining piece of precisely similar soil, which was laid down one year later, and had received the benefit of two years' tillage and two heavy dressings of barn manure.

The piece first mentioned has since been laid down anew, at the same season of the year, with a fair dressing of barn manure, and in the spring following with a good dressing of plaster and ashes, (Guano not being found at the time in the market;) but without any thing like similar results.

Greatly beneficial results have been observed, by the same farmer, from the use of Guano, upon wheat and other small grains, upon corn fodder, beans, peas, cabbages, squash, and other vines, young fruit trees, currant, and other bushes. Indeed there is no article of horticulture or field culture to which the judicious application of this manure would not, he believes, be of great service.

The experience and observation of this farmer lead him, therefore, to venture the opinion that our farms would be, in all respects, bene-

fited, and the expense of cultivation lessened by a judicious and liberal use of Guano, wherever barn manure, though it were a gift, must be carted more than half a mile. In this opinion he is confirmed by the extraordinary effects produced on the nearly exhausted soils of Virginia, and Maryland, and Kentucky, and North Carolina, of which reliable accounts are given in the publications of the day.

PHOSPHATES AND SUPER PHOSPHATES OF LIME.

Of the value of these fertilizers and their effects, neither experience nor observation enables us to speak with confidence. From the remarks made to us by judicious and intelligent farmers, and from the favorable accounts, which we presume are in all respects reliable, given of experiments made with them, we are induced to urge upon the farmers of this County the careful and thorough trial of their use in different modes of operation, and upon different sorts of vegetable culture. We believe that every new discovery in this department of agriculture, and every instance of the successful application of concentrated manure to the soil is of vast importance to the farmer, and will help to lessen the hardships of his occupation, to increase the sum of his gains, and to enlarge the opportunity for his rest and intellectual and social enjoyment and improvement.

CORN FODDER.

The cultivation of this highly nutritious, succulent food was long ago recommended by one of the most eminent Agriculturists in this part of our country, the Hon. Timothy Pickering, of Salem, first President of the Essex Agricultural Society. In this County, as in Essex, and elsewhere, it has been uniformly attended with the best results. Tracts of old pasture land, and of light, sandy soil, have been made to produce large crops of this choice feed for Dairy Cows, at a period when the grass on such land would have failed to furnish even a tolerable supply; while, at the same time, the soil has been placed in the most suitable condition for future tillage and other crops.

The experience of a farmer in this County, who has grown corn fodder for many years, has been an increase of succulent and nutritious feed sufficient to sustain double the number of Cows formerly kept on the same land. His mode of cultivating it has been chiefly by the use of the plough. The ground being in proper condition is deeply furrowed with a large plough. These furrows are supplied with a heavy dressing of green manure, or of green and compost thoroughly mixed. *Sweet Corn*, or a mixture of Sweet and Northern field corn, is sown thickly upon them: and the soil is turned back to cover it by the horse plough passing on each side of the furrow. This, with slight use of the hoe, will sufficiently cover and level the top of the drill, and one repetition of the ploughing and hoeing will finish the necessary labor on the growing crop. The Sweet Corn is found to produce a more succulent and tender stalk and leaf than the White Southern Corn, which is usually planted. Cattle will eat it with avidity and entirely, while the coarse stalk of the other sort is often left untouched upon the field, or in the crib. The leaf is broader and draws more nourishment from the atmosphere, and the whole plant is less exhausting to the soil and more grateful to the Cattle. The superior effect of its use is also to be traced in the quality of the milk and the butter.

The extensive culture of this article is therefore recommended with the full belief that the benefit of it will be seen in the large increase of stock which can be well kept on the same number of acres, and in the general products and profits of our farms. We add, also, that the use of green corn fodder, as the principal food, has been found amply sufficient to sustain and keep in good, thriving condition, store pigs, from its first growth until the autumn frosts are felt.

From a brief experience we are disposed to recommend with much confidence the "Stowell," or "Evergreen Sweet Corn," as the most productive variety to be grown on our soil. From this corn, with no great labor or cost, from five to ten tons of the richest feed may be raised on any acre of ground which would have failed to yield, under the best cultivation, three, or even two, tons of hay, or in pasture, to have kept, in good condition, one cow. If cut early and dried in small bundles on the fence, or in stocks, after wilting in the sun, this plant affords excellent winter feed for all sorts of stock, and if

chopped and steamed, mixed with meal or barley meal, for fattening cattle and swine.

In conclusion, we would once more urge upon farmers the formation and generous support of town clubs, or associations for mutual encouragement and help. These clubs or associations are obviously needed, and may be made the sources of benefits which can hardly be overestimated. They may be particularly useful in a large part of this County by enabling the several members of them to avail themselves, at comparatively trifling cost, of a large number and variety of the best Agricultural books and newspapers which a common fund might easily procure. Still further they would, in much the same way, furnish many individuals the help of labor-saving implements and conveniences which their separate means would not afford, however desirable such help might be. The most intelligent farmers, and best managed farms will generally be found where valuable Agricultural books and papers are most extensively read; and the most thrifty and contented cultivators of the soil will generally be seen, we believe, where the best implements and means for saving hard toil and a too often limited time are always at hand.

We venture to refer to our suggestions in a former report, upon the expediency of sub-dividing the Committee on Farms for specified objects. We subjoin, also, a series of "standard requisites and evidences of good farming," which we have found in a late number of a distant journal,* and recommend to be kept in view, though it may not be more than approximated to, in deciding the claims of any future applicants for the premiums of this Society.

Respectfully submitted for the Committee, by

CHARLES C. SEWALL, *Chairman.*

---

* Northern Journal, Watertown, N. Y.

"REQUISITES AND EVIDENCES OF GOOD FARMING."

1st. A good soil, well tilled, and kept free of various weeds, both on the fields and the roads.

2d. Lots well fenced, and suited in number to the size of the farm.

3d. Substantial and convenient barns and stables of sufficient dimensions to contain the produce of the farm, and to comfortably house the cattle kept on it.

4th. A judiciously arranged dwelling, in neat condition, with a well and filtering cistern.

5th. Convenient buildings to facilitate the economical management of the farm; among which may be enumerated a wood house, a wagon and tool house, a work shop, a granary and corn house, a convenient piggery, an ice house, ash and smoke house, all secured against decay by being well raised from the ground and neatly painted or whitewashed.

6th. Convenient yards attached to the barns and stables, so arranged as to prevent wastage of the liquid manure, well sheltered from the blasts of winter, and provided with water for the cattle.

7th. Door yards laid with grass and flower beds, and shaded by ornamental trees, indicating to the passer-by the dwelling of taste, health and comfort.

8th. A kitchen garden highly cultivated, and containing every species of vegetable that can be raised in our climate, with strawberry and asparagus beds.

9th. A fruit garden or orchard, where choice apples, cherries and plums are carefully cultivated, and where can be found neat rows of raspberry, gooseberry, blackberry and currant bushes.

REPORTS ON PLOUGHING.

DOUBLE TEAMS.

Your Committee submit the following Report, viz.: —

That nine claims were presented for premiums, and so good was the performance of each claimant, that your Committee would be happy, did the means of the Society warrant, to award a premium to each. But the great expenses incurred by the erection of our Agricultural Hall, in connection with the usual demands on the Society's funds, preclude the gratification of their wishes.

Your Committee were unanimous in recommending, that the Society's premiums be awarded as follows, viz.: —First Premium, $10, to S. J. Capen, of Dorchester; Second Premium, $8, to Horace and Moses Whiting, of Dedham; Third Premium, $6, to A. D. Weld, of West Roxbury; Fourth Premium, $4, to J. W. Daniels, of Medway.

In conclusion, your Committee intended to make some remarks on the subject of Ploughing; but, instead of this, they refer with much pleasure to the former Reports of this Society, and especially to an excellent Essay on the "Principles of Ploughing," by Sanford Howard, Esq.

Respectfully submitted,

RALPH SANGER, *Chairman.*

Dover, November, 1853.

SINGLE TEAMS.

Henry Goulding, of Dover;	1st	Premium,	$8;	Prouty & Mears, 155.
Timothy Tucker, of Milton;	2d	do.	$7;	do. 154.
A. D. Weld, W. Roxbury;	3d	do.	$6;	do.
L. & J. E. Eaton, Dedham;	4th	do.	$5;	Ruggles, Nourse, and Mason.
B. N. Sawin, Dover;	5th	do.	$4;	Prouty & Mears.
Hollis Mann, Dover;	6th	do.	$3;	do.
B. V. French, Braintree;	7th	do.	$2;	do.

The Committee, owing to all the ground being ploughed well, found it difficult to decide on the Premiums, and particularly on the three last; and they recommend a gratuity of two dollars to Daniel Pierce, of Milton.

G. G. HUBBARD, *Chairman.*

HORSE TEAMS.

The Committee on Horse Teams respectfully report —

There were four teams entered for premium; and they award as follows: —

To Isaac H. Meserve, Brook Farm, Roxbury; with Ruggles, Nourse & Mason's plough; the first premium of . . $8.00

To Patrick Wall, of Dover; with Ruggles, Nourse & Mason's plough; the second premium, ... $6.00

To Hiram W. Jones, of Dover; with Prouty & Mears' plough; the third premium of $4.00

To Benjamin V. French, of Braintree; with Prouty & Mears' plough; the fourth premium of $2.00

HORATIO N. GLOVER, *Chairman.*

REPORT ON SPADING.

Your Committee on the Spading Match beg leave to report —

That the work done shows a very great improvement from that of last year, in all respects; and, in your Committee's opinion, there was but a slight shade of difference in the work done, between some who received premiums and those who did not.

They award the following: —

1st	premium to	Peter Ford, of North Wrentham, . .	$8.00
2d	do.	David Scanlan, of Dedham, . . .	7.00
3d	do.	Wm. Hickey, of Dorchester, . . .	6.00
4th	do.	Patrick Donahoe, of Dedham, . .	5.00
5th	do.	Thomas Flinn, of Dorchester, . .	4.00

6th premium to Timothy Hickey, of Dorchester . . $3.00
7th do. Denis Doody, of Dorchester . . 2.00
8th do. John Gorry, of Dorchester . . . 1.00

In behalf of the Committee,

SAM'L DOWNER, JR., } *Committee.*
GEO. M. SMITH, }
SAM'L ELLIS,

Dedham, Sept. 28, 1853.

REPORT ON FAT CATTLE.

We the undersigned, Committee on Fat Cattle, report, That one Ox entered by Luther Spear, of Dorchester, was the only one entered for premium, — that we do not consider said Ox worthy of the first premium, — and, therefore, award to said Luther Spear the second Premium of Five dollars.

ELIJAH THAYER,
WM. FAIRBANKS.

Dedham, Sept. 28, 1853.

REPORT ON BULLS.

The Committee on Bulls report, that the whole number on exhibition was ten. After a careful examination of their merits, and being governed by the importance of encouraging the use, only, of such animals as are known in pedigree, and of pure blood, the Committee make the following awards: —

CLASS DEVON. — For the best full blood, the first premium to Aaron Davis Weld, of West Roxbury, $5.00
Do. do. For the second best, the second premium to John S. Eldridge, of Canton, . . $3.00
CLASS AYRSHIRE. — For the best full blood, the first premium to Lemuel Billings, Quincy, . $5.00

No second premium awarded.

CLASS ALDERNEY.—For the best full blood, the first premium to Lyman Kinsley, of Canton, . $5.00

No second premium awarded.

The Committee also recommend Diplomas for the following GRADE Animals, or those whose pedigree could not be ascertained: —

To Albert Southworth, of Stoughton, for his large Devon Bull, three years old, weighing 1520 lbs.

To the same gentleman, for his GRADE, (Devon and Native.)

To S. Palmer, of Milton, for his fine GRADE Calf, (Durham and Devon.)

To Jesse Farrington, of Dedham, for his GRADE, (three-fourths Durham and one-fourth Native.)

In conclusion, the Chairman of the Committee submits the following remarks: —

When we consider the immense loss which is annually sustained by the breeding and rearing of cattle of an ordinary character, we are impelled to urge upon the attention of our brother farmers, the absolute importance of improving their stock, by the introduction of *pure blood* animals, and of such *only* as are best adapted to the purposes for which they are wanted.

Much mismanagement and misunderstanding have hitherto existed in regard to this most necessary department of husbandry. Hence the bad results which have accrued from the indiscriminate crossing of what are termed *native* stock with blood or grade animals, without regard to their distinctive qualities. For instance, to cross a common cow with the Ayrshire bull — her progeny with a Durham — this with a Hereford — and again, perhaps, with a compound of all these bloods — would be a retrograde movement, rather than any definite approach towards the object to be attained.

It may then be considered as one of the most important elements of success, to breed from *pure* blood animals. Appropriate treatment and proper food are of great consequence; but it is not so much to these that we are indebted, as to the peculiar tendencies of the race from which we desire to raise stock. The desideratum which we should seek to obtain, is the breed which possesses *certain properties*, whether for the dairy, the stall, or the yoke.

To "*breed directly in the line*," is now admitted to be the best, if not the only safe method for the improvement and perpetuation of

the blood; and in all cases from pure blood on one side, and if possible from the male. The best animals of the class desired should be selected, and, following down in a direct line, the purity of the offspring should be maintained, only changing occasionally from one family (not breed) to another, to preserve vigor of constitution.

The Chairman of the Committee, having expressed the above views, would recommend to the farmers of Norfolk County to dispense, as far as practicable, with bulls of a nondescript character, and to avail themselves of such as are known to be of *pure blood*,— confining themselves to the class which may be best adapted to their own locality or purpose. Maturity and good constitution should be sought for in the dam, in which case, although the male be young, if healthy and vigorous, her progeny will be more affected with the general character of the breed to which he belongs, than with his size or age.

MARSHALL P. WILDER, *Chairman.*

REPORT ON COWS.

The Committee on Milch Cows report, That of this class the number entered for premium was fifteen. The unfavorable state of the weather prevented sending from a distance much valuable stock, which would otherwise have increased very much the interest felt in this — one of the most important departments of our exhibition.

The entries were as follows, viz.: —

By S. J. Capen, Dorchester, 2 Durhams.
" " " 1 one-half do., and one-half Ayrshire.
" " " 1 Ayrshire.
" Francis Guild, Dedham, 1 Native.
" J. W. Clark, " 1 do., Cow and Calf, (4 months 19 days old.)
" S. R. Spaulding, W. Roxbury, 1 Alderney.
" Lyman Kinsley, Canton, 1 do.
" Wm. T. G. Morton, W. Needham, 1 Durham.
" " " 1 one-half Devon and one-half Native.
" M. P. Wilder, Dorchester, 1 Native.

By M. P. Wilder, Dorchester, 1 three-fourths Durham.
" J. J. Dixwell, W. Roxbury, 1 Alderney.
" A. D. Weld, " 1 one-half Durham one-half Ayrshire.
" Lemuel Billings, Quincy, 1 Durham.

The premiums for Cows in milk, which were accompanied with written certificates of their yield, were awarded as follows, viz.: —

S. J. Capen, Dorchester, first premium, for his one-half Ayrshire and one-half Durham Cow, . . . $10.00
Francis Guild, Dedham, second premium, for his Native, 8.00
J. J. Dixwell, W. Roxbury, third do. do. Alderney, 6.00
J. W. Clark, Dedham, fourth do. do. Native, 4.00

A gratuity is recommended of $3 to M. P. Wilder, for his Native Cow "Brindle," which was excluded from the Society's premium, having taken the first last year.

Your Committee would also recommend a gratuity of $3 to S. R. Spaulding, of West Roxbury, for his very beautiful Jersey Cow, which, in the absence of a written certificate, was not entitled to any premium.

Premiums on Cows, not less than three years old, of the following breeds: —

Jersey — first premium	to J. J. Dixwell, W. Roxbury,	.	$5.00
" second "	" Lyman Kinsley, Canton,	.	3.00
Ayrshire — first "	none entitled.		
" second "	to S. J. Capen, Dorchester,	.	3.00
Durham — first "	" Lemuel Billings, Quincy,	.	5.00
" second "	" S. J. Capen, Dorchester,	.	3.00
Grade — first "	" S. J. Capen, "	.	5.00
" second "	" Wm. T. G. Morton, W. Needham,		3.00
Native — first "	" Francis Guild, Dedham,	.	5.00
" second "	" J. W. Clark, "	.	3.00

Gratuities for stock, under this head, are recommended as follows:

To A. D. Weld, W. Roxbury, for his Cow "Beauty," . $3.00
" M. P. Wilder, Dorchester, " " Grade Cow, . . 2.00

Special notice is taken in this connection of a very superior full blood Durham, owned by Dr. Wm. T. G. Morton, of Needham, not having been in his possession long enough to entitle him to a premium. Dr. Morton's statement is as follows: — "The Durham

Cow is from the Stickney importation; weighs 1500 lbs.; six years old; calved in April, 1852; gave, through the month of May, 1852, twenty-eight quarts of milk daily — through the month of August, 1852, twenty-five quarts daily, and drove one and a quarter miles to an ordinary pasture; had no grain whatever."

A gratuity of $3 is recommended to Dr. Morton, for his full blood Durham.

The following are the copies of certificates in relation to the yield of milk and butter, to which premiums are awarded: —

S. J. CAPEN'S CERTIFICATE.

The Cow offered for premium is one-half Ayrshire and one-half Durham; eight years old. She calved May 2d, 1853; the calf was killed when three days old. From June 1st to June 10th she averaged 23 quarts of milk per day, weighing 53 lbs. From Sept. 1st to the 10th, she averaged 17 quarts per day, weighing 41 lbs. She was fed on grass and corn fodder.

Dorchester, Sept. 27, 1853.

FRANCIS GUILD'S CERTIFICATE.

Native Cow, seven years old. From the 10th to the 20th of June she gave 327 1-4 lbs. of milk, which made 19 lbs. of butter. From the 10th to the 20th of September she gave 250 lbs. of milk, which made 16 lbs. of butter. She calved March 23d; her feed, grass — *not good feed* — and fed some with green corn in August and September; one quart of meal and one quart of shorts each day.

Dedham, Sept. 27, 1853.

J. J. DIXWELL'S CERTIFICATE.

I send my Jersey Cow for exhibition. As I keep her for family use, I have very little record of her yield. Her excellence is in the quality, not the quantity, for she is not a large milker. During the last week in May, and the first week in June, her milk was set aside for butter, with this result: —

1st week, 76 3-4 quarts of milk, from which was made 12 lbs. butter.
2d " 72 1-2 " " " " 13 1-2 lbs. "

In addition to pasturage, she was fed with two quarts of shorts — one of Indian meal and one of oil meal — each day. She calved the 5th of March. Now she gives but five or six quarts per day. On several trials, her milk has produced a pound of butter from a fraction under 5 1-2 quarts of milk.

West Roxbury, 27th Sept., 1853.

J. W. CLARK'S CERTIFICATE.

Native Cow, six years old. Calved May 7, 1853. For the first three weeks she averaged 18 quarts of milk per day. The first week in June, we used 69 quarts of milk, 3 quarts of cream, and made from the remainder 8 lbs. of butter. The second week, used 56 quarts of milk, 6 quarts of cream, and made 6 1-2 lbs. butter. We measured the milk but once this month, (September,) she gave 15 quarts per day. Feed, 3 to 5 quarts shorts per day, and what grass she wanted.

The Committee, before closing their Report, will venture some suggestions upon the general management of Milch Cows.

The principal and most important points are these: The selection of stock; their general care and treatment; a judicious and well regulated method of feeding.

In relation to the first of these, but little need be said by the Committee, the selection being a matter depending mainly upon the taste and judgment of those interested; and of which there is almost as great a difference as there are owners. But when it is considered that the cost of keeping a good cow is but very little, if any, more than that of a poor or ordinary one, it will be conceded that this is a matter of great importance to the farmer. But with ever so good a selection, the result, so far as profit is concerned, will be anything but desirable, unless a faithful and methodical plan, in regard to care and keeping, is most strictly adhered to. For it is believed that a stock of cows, however good, may, by only a common or ordinary mode of feeding and treatment, be reduced in their product, so as to make but poor returns for what is expended upon them; while, on the other hand, a common or ordinary stock only, with judicious care and feeding, may be made to increase largely in their yield, and pay a remunerating profit to the farmer.

It is difficult to attach too much importance to the second point proposed, viz., that of care and treatment. It is believed to be no uncommon thing among our farmers, in the busy season of the year in particular, to postpone the "milking time" till almost night, so that the men having this duty in charge may be enabled to do their day's work in the field, and then, as a matter of course, milk the cows. Now all hands must take part in this, so as to despatch as rapidly as possible this closing job of the day. And who doubts that this, done after a hard day's work in the heat of summer, with exhausted body, coupled with the certainty of a late supper; with the hurried manner of driving the cows from pasture, the impatience of the men, and consequent harsh treatment of the cattle, the udder but two-thirds emptied of its contents, and in fact the whole work, in some way or other, imperfectly done,—who doubts that it is a mistake in management that must prove decidedly prejudicial in its results? A stock of cows, on the other hand, should be tended by the same help daily — and, when it can be done by one man, never allow more to take a part in it — and tended in such a way that a feeling of perfect confidence and affection will be cultivated by them for their keeper, which tender and gentle treatment will be sure to beget.

As to the manner of feeding, and particularly in the winter, it is believed that much harm results, either from over or under feeding, and feeding at irregular and improper times. A stock of cows should be fed but three times in the twenty-four hours, and at just the same hour each feed. And, instead of crowding before them as much as they can comfortably dispose of, or more, feed a little sparingly, so that the crib will be entirely emptied within the hour; and, if by chance a little is left, be sure and have it removed, and the crib swept entirely clean.

Care should always be taken to furnish an ample supply of pure water, say, at least, three times each day, the last watering to be as late as eight o'clock in the evening, at which time they will partake more freely than at any other. It is also advised, that provision be made for watering in the barn, instead of, at any time in the winter, being obliged to have them exposed to the storms and cold without. It is believed, that by furnishing a supply of water thus to a stock of cows in milk, the quantity, by this alone, will be increased from 15 to 20 per cent. above what it would be by the usual mode of treatment.

One other important point to notice, is the necessity of keeping cattle in a warm but well-ventilated barn. Your Committee are satisfied, by their own observation and experience, that from December to April there is great gain, both in yield of milk and flesh, by keeping a stock of milch cows tied up in the barn at least five days in seven, and that one hour of out-door exercise, in each of the two days, is all that should be allowed them. So that it may be safely stated, allowing all other things to be equal, that a careful observance of these two latter points alone, viz., a good supply of water in the barn, and warm and nearly equal temperature, will add, at least, one quarter to the product. Dry bedding, day and night, with careful carding, should not be omitted.

It is believed that the average yield of milk throughout the State will not exceed four quarts per day for each cow, through the year. Now, if this opinion is correct, it is, to say the least, discreditable and inexcusable; for it is unquestionably true, that the very same stock may be made to yield six quarts, and that, too, without any additional consumption or cost of feed, but simply by judicious and careful treatment.

Your Committee, in conclusion, would recommend that a premium of $25 be offered for the greatest yield of milk per day, through the year, from ten cows, of not less than eight quarts; of $15, from six cows; and $10, from not less than four cows. Statements to be made by the applicants of breed, mode and cost of keeping.

For the Committee,

JNO. H. ROBINSON, *Chairman.*

REPORT ON HEIFERS.

Your Committee have attended to the duty assigned them, and respectfully report as follows, viz.: —

JERSEY. — No premiums awarded.

AYRSHIRE. — To Samuel J. Capen, of Dorchester, first premium of $3.00

Second premium not awarded.

DEVON. — To John S. Eldridge, of Canton, first premium of $3.00
Also, to the same gentleman, the second premium of . 2.00
DURHAM. — To James Dorr, of Dorchester, first premium of 3.00
The second premium is not awarded. Your Committee are of opinion that entries were made of Heifers of an age which, by the rules of the Society, were placed beyond their control.
GRADE. — To Solomon Flagg, of West Needham, the first premium of 3.00
To David Chase, of Dedham, second premium of . . 2.00
NATIVE. — To Alfred R. Ellis, of Walpole, first premium of 3.00
To Israel Hunting, of Needham, second premium of . 2.00
HEIFERS IN MILK. — To Aaron D. Weld, of West Roxbury, first premium of 6.00
To Samuel J. Capen, of Dorchester, second premium of 5.00
To Aaron D. Weld, of West Roxbury, third premium of 4.00
BEST HEIFER UNDER ONE YEAR OLD. — To John R. Dow, of Milton, first premium of 3.00
To William Pierce, of East Needham, second premium of 2.00
To Joseph Fisher & Son, of West Dedham, third premium of 1.00

Your Committee would respectfully recommend that gratuities be given to the following gentlemen having stock possessing excellent qualities: —

To J. J. Dixwell, of W. Roxbury, for his Alderney Heifer, $2.00
To Joseph Fisher & Son, of West Dedham, one-half Native one-half Devon, 17 months old, ... 2.00
To Edward R. Pope, of Quincy, one-half Native one-half Devon, 7 months 27 days, ... 1.00
To John Fussell, of Roxbury, one-half Ayrshire one-half Native, 16 1-2 months old, ... 2.00
To Aaron D. Weld, of West Roxbury, one-sixteenth cream pot, one-sixteenth Durham, fourteen-sixteenths Devon, six months old, ... 2.00
To Seth Blake, of Dover, one-half Durham one-half Native, four months old, ... 1.00
To Benjamin H. Tubbs, of West Dedham, Native, four months old, ... 1.00

CALVIN RICHARDS, *Chairman.*

REPORT ON WORKING OXEN.

Your Committee would report, There were but four entries made for trial, and they have awarded premiums as follows: —

To Timothy Tucker, of Milton, Oxen 6 years old, the first premium, ... $8.00

To Aaron D. Weld, of W. Roxbury, Oxen 5 years old, the second premium, ... 6.00

To B. V. French, of Braintree, Oxen 7 years old, the third premium, ... 5.00

The trial was performed by drawing a cart, loaded with two tons of stone, from the bottom of a long hill to the top, and back. Each team trying their skill and strength in backing the same load up hill, two or more times, while descending at difficult points. The same cart and load were used by each team. Your Committee would add, that the work was quite satisfactorily performed by each of the competitors, Mr. Tucker's oxen doing it with the most ease to both themselves and their driver. In the opinion of your Committee, with some of the drivers, there was quite too free use made of the whip and voice: the lash leaving marks, too true a proof of the strength of the arm that wielded it. Your Committee would speak with pleasure of three yokes of oxen, exhibited by A. D. Weld, as being worthy of note; their docility and training, as exhibited, were well worth the attention of farmers. They were entered for premium; but, as none was offered except on each yoke separately, your Committee had not the power to award any to them, though for beauty of shape, training, and matching in color, it is doubted whether they could be excelled in the County.

We regret that a cold easterly storm prevented the appearance of so large a number of competitors as usual; and also, that, probably for the same reason, there were no town teams present. With the remark, that probably no animal on the farm repays more fully kind care and treatment from its owner and driver, than the ox, we respectfully submit this our Report to the Society.

Yours,

ROYAL W. TURNER, *Chairman.*

REPORT ON STEERS.

The Committee on Steers have attended to the duty assigned them, and offer the following Report: —

They were not embarrassed in determining the comparative claims to first or second premium, and they feel confident that they have given satisfaction in their awards to every expectant of a premium. For the pair of twin steers, three years old, half Durham and half Native, owned by Enslin and Ayers, of West Roxbury, the Committee award the first premium of Five dollars. They regret that they could not award the second premium, but they feel justified by the fact, that only one pair of steers, three years old, was exhibited. There was another pair of steers, and only one, twins, fourteen months old, too young to be entitled to a premium, by the rule, owned by James W. Daniels, of Medway, and for these the Committee recommend a gratuity of Two dollars.

For the Committee,

D. KIMBALL.

Needham, Oct., 1853.

REPORT ON HORSES.

The Committee on Horses beg leave respectfully to report —

That there were no matched Horses offered for exhibition.

That they award the first premium of $3 to Henry S. Clarke, of Walpole, for the best single carriage Horse.

For the best Stallion, to Albert R. Mathes, of Roxbury, the first premium of $10.

The Committee recommend that the Society's Diploma be given to Messrs. Payne & Mathes, of Roxbury, for a grey Stallion, said horse not coming under the rules entitled to a premium.

The Committee recommend that a gratuity of $3 be given to John J. Carr, of Quincy, for a superior sorrel Mare, four years old, the rules excluding her from a premium.

The Committee award to Joseph H. Billings, of West Roxbury, the first premium of $5, for the best three years old Colt.

The Committee award to S. S. Whitney, of Dedham, the first premium of $3, for the best two years old Colt.

The Committee award to B. W. Balch, of Dedham, for the best yearling Colt, the first premium of $2.

The Committee, laboring under considerable embarrassment in deciding on the yearling Colts, from the superiority of two exhibited, award a gratuity of $2 to Joseph H. Billings, of West Roxbury, for his yearling Colt.

The Committee award to Samuel Cook, of Milton, the first premium of $7, for the best breeding Mare and Colt.

The Committee award to Benjamin Neal, of Walpole, the second premium of $5, for the second best breeding Mare and Colt.

The Committee award to Joseph H. Billings, of West Roxbury, a gratuity of $2, for a very superior breed Mare and Colt.

The Committee recommend that the Society's Diplomas be given to S. S. Whitney, of Dedham, for his bay Mare, 27 years old, with Colt by her side; and to John Fussell, of Roxbury, for his bay Mare, 18 years old, with Colt by her side.

The Committee award to Benj. V. French, of Braintree, the first premium of $6, for the best Farm Horse.

The Committee award to Elijah Tucker, of Milton, a gratuity of $5, for a sorrel Horse exhibited by him, at the very advanced age of 31 years, and owned by him 22 years, thus demonstrating that good care and kindness to this noble animal do not lose their reward.

In behalf of the Committee,

JOS. L. BRIGHAM.

REPORT ON SWINE.

The number of contributors under this head were 64, and the contributions consisted of 34 boars, 27 breeding sows, 173 pigs and 15 fat hogs and pigs, nearly all of which were of the Suffolk breed, or the Suffolk largely predominating in the blood.

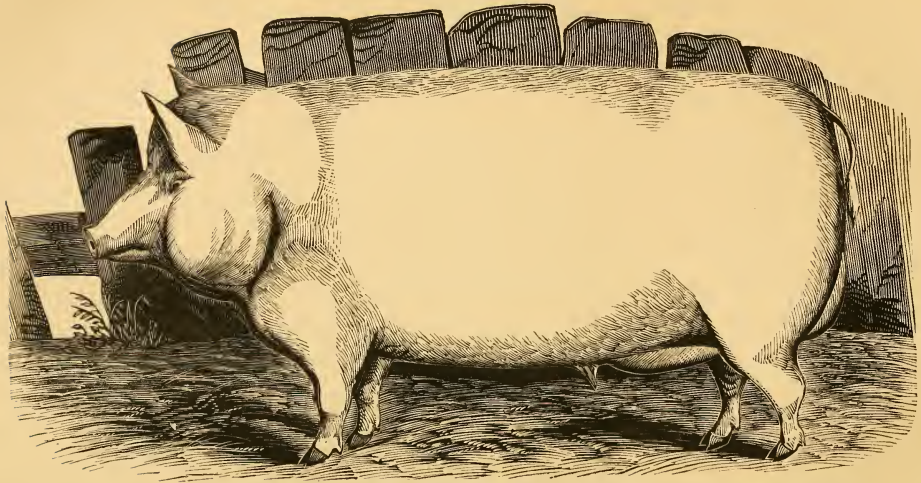
W. T. G. Morton, of West Needham, exhibited a Suffolk boar fifteen months old, having his points well developed, and has proved himself a good stock getter, having served 40 sows, averaging over 10 pigs each. Several of the litters were on the ground attesting a good dissemination of the sire's points. Dr. Morton also contributed a fine Suffolk sow, with a litter of pigs, showing to a decided advantage over the one-half and seven-eighths blooded stock from the yard of the same contributor.

Richard Richardson, of Medway, exhibited a Suffolk boar one year old, which was the admiration of all the visitors, being at fault in no desirable point, and not second to any other on the ground. But on account of his age no evidence could be handed in of his efficiency. The Committee were obliged to put him down as low as the second premium; another year, and he may prove a troublesome competitor for the honors of the Society's highest award.

Henry L. Howe, of Grantville, offered a Suffolk boar, one year old, which is a credit to the blooded stock; and though in the highest possible condition, his owner assured the committee, in writing, that he was a certain stock getter.

S. J. Capen, of Dorchester, presented a pair of imported Suffolk pigs, eight months old, of good promise. The Committee believed they would not come within the rules of the Society entitling them to a premium, since, if they were only eight months old, they must have been shipped from England quite young, or the vessel must have had a remarkably short passage to have allowed a possession of six months.

Henry L. Stone, of Grantville, contributed a breeding sow and pigs, and also a boar of the Suffolk breed. Mr. Stone's stock bespoke care and attention.



IMPROVED SUFFOLK BOAR.

Bred by Dr. Morton, Etherton Farm, West Needham, Mass., for which the *First Prize* was awarded by the Norfolk Agricultural Society, at the Exhibition, 1853.

Abner and Henry Alden showed Suffolks of excellent promise, of all ages, from four months up to two years, — a part being from the stock imported by Mr. Stickney, and a part from the stock imported by Mr. Motley.

George Houghton, of Neponset, contributed a very handsome young Suffolk boar, which may prove of essential service, in that vicinity, as a good stock getter.

Joseph Robinson, of Neponset, offered some handsome Suffolk pigs ten weeks old, probably from the same branch of stock as the last named, that neighborhood having sent out some of the choicest of this desirable breed.

Calvin Dean, of Canton, exhibited a very large boar of three years, being the same which elicited so much attention at the Society's exhibition, 1852. He partakes largely of the Suffolk blood, and as a stock getter, his reputation in his neighborhood stands A 1.

John Fussell, of Jamaica Plain, entered a large number of Suffolks, Chinas, and the "Improved Essex." Probably no pig on the ground received more praise, and deservedly too, than did his young Essex boar. Any owner might well be proud of so fine an animal coming forward to do credit to this but recently imported breed. There were but two other contributors under the head of "Improved Essex," viz., B. V. French, of Braintree, and Eben Wight, of Dedham; all were received from L. G. Morris, of Mount Fordham, New York.

The Committee believe that in granting a diploma for the "Improved Essex" boar, the Society stands accredited as well as the owner of the animal, when by this act they give a standing proof of their estimation, and recommend his service for the improvement of this branch of stock.

Aaron D. Weld, of West Roxbury, exhibited an imported China sow, with her litter of thirteen pigs, (half Suffolk,) and both mother and pigs were good evidence that the owner's crib is "close to hand." Though the China enters largely into all the improved breeds of swine, and as a cross are desirable, yet when bred pure they lack in *essential* points. As breeders, they are certainly very prolific.

The breeding sow from M. P. Wilder was a large and fine specimen of a cross between the Suffolk and Middlesex; and with her litter of ten pigs attracted much attention.

The "Town of Needham" sent five pigs, three-fourths Suffolk,

about five months old. And if these are to be taken as evidence of the "town's keep," one might well consider it the best aldermanic habitation in the county.

Henry Goulding, of Dover, also offered, under the head of weaned pigs, five fifteen-sixteenths Suffolk pigs of five months. They were large of their age, and showed great aptitude to fatten, even on a short allowance.

Hiram W. Jones, of Dover, exhibited — not offered for premium — six pigs, one-half Suffolk, which looked as happy as do the pigs "lying in the very best of straw."

Eben Wight, of Dedham, filled several pens with Suffolk sows, Improved Essex sows, and their progeny, but consequent on his being of the Committee, they could only be offered for exhibition.

Probably no County in the State can show so good a stock of swine as can the County of Norfolk, diligent care having been taken in the selection and importation of the choicest breeds in vogue.

Although the number shown was sufficient to fill nearly all the pens, and the swine were in every instance excellent, still the amount *intended* to have been shown would have trebled those on the grounds had the weather proved propitious. The Committee learned from many individuals known to be good breeders of the "Improved Suffolk," that the pigs were boxed to be forwarded, but detained over till the second day, hoping for more favorable weather.

As previously stated, nearly all the swine were of the "Improved Suffolk," or that stock largely crossed with the Middlesex or the Mackay. In order, therefore, more fully to illustrate the value of such breeds or varieties as are generally brought to your grounds, they give a lengthy extract from the admirable Paper on Swine, drawn up by Sanford Howard, Esq., a writer whose opinion on stock is not second to that of any other writer.

"The following is a brief notice of some of the breeds of domestic swine. It is only a few years since it was very common to hear an expression signifying that the breed of a hog is in the food he gets. This notion has been to a great extent eradicated, but it is not yet without advocates. There are still some who do not believe there is anything in the breed, because they 'cannot see how it is;' but that is no reason for denying the fact. They cannot see how it is that in the seeds of a fruit, (as of the pear, for instance,) all of which

are to outward appearances just alike, and probably would appear so by the nicest chemical test — some will produce fruit the most delicious and melting, and others, with precisely the same soil and culture, that which is the most crabbed and austere. They cannot see how it is that the bear should line and cover his carcass with fat to an amount nearly equal to half his whole weight, and which supplies his lamp of life for five months in the year, while the wolf and the fox remain gaunt and lean. They cannot see how it is that the same kind of food, when eaten by the ox, the sheep, the turkey, or the common fowl, produces meat, which, to human taste, is of very different qualities.

"All these effects are obvious; yet we cannot see their causes, nor fully understand them. All we can say is, they result from the varied nature of things. They show, however, that there is in the original germ of plants and animals, a principle which produces certain peculiarities greatly affecting their value for the purposes of man. This principle is not only manifested in the characteristics of different species, but exists more or less in varieties of the same species. We see its effects in the different kinds of wheat, and in other species of grain — in varieties of peas, beans, apples, potatoes, &c., — and in the peculiarities of the different varieties of the dog, the sheep, the hog, and other domestic animals. It is man's business to study these peculiarities, and secure and apply them in those ways which will render them most subservient to his wants.

"In regard to swine, it is to be regretted that the difference in the various breeds has not been demonstrated by exact experiments. We are, however, in possession of certain facts of great importance in the case. For instance, many farmers have found that on the same amount and kind of food, some hogs will gain much faster than others; that some will become fat on uncooked vegetable food, as raw apples, while others require grain or meal to bring them to a slaughtering condition; that some will keep in good order, and will thrive on clover or grass only, while others can scarcely live on such fare; that in some, the tendency to fatten is so great, that it is necessary to keep them on very low diet to insure their breeding.

"There is not only a difference in the amount of meat which different swine are capable of acquiring from an equal amount of food, but there is a great difference in the quality of the meat. Some persons, doubting this, may say, 'pork is pork;' so 'beef is beef;'

but is there not a great difference in the texture and flavor of beef from cattle of different breeds? This difference is so well understood in England, that the prices of beef are to a considerable extent regulated by the breed — the West-Highlanders and Galloways taking the first rank, then the Herefords and Devons, and last, the Shorthorns. A similar scale of prices regulates the market in reference to mutton from various breeds of sheep. The difference in the meat of swine is not less striking. Some have a thick skin, with flesh of an open, coarse texture, and unpleasant flavor; others a thin skin, with fine-grained, well-flavored flesh. Some convert their food almost wholly into fat, while in others it enters chiefly into the composition of muscle. In some, the fat is accumulated chiefly on the belly, and is of a soft, oily nature; in others, it is laid more on the back, and is comparatively firm and hard.

"Of course, the breed should be chosen with reference to the purposes in view. If lard-oil is the principal object, the animal which will give the greatest quantity of soft fat for the food consumed will be most profitable. For barrelling, 'clear pork' is the main object; and the animal which will give the greatest quantity of solid fat on the back and sides, is preferable. This is the description of pork which is chiefly consumed in the Eastern States and in the fisheries. In the Southern and Western States, pork is used chiefly in the form of 'bacon' — the whole of the meat is 'dry-cured' and smoked. Where this is the object, the clear fat which is so much prized in other cases, is not desirable; but a carcass which gives a considerable proportion of lean with the fat is much better.

"The swine of the United States have been derived chiefly from Great Britain, though occasional importations have been made from other countries. The British stock of the present day consists of various mixtures of the aboriginal race of that island with various Asiatic stocks — mostly Chinese and Siamese. Youatt, in his treatise, published in 1846, observed that the old breeds were 'rapidly losing all traces of individuality under the various systems of crossing to which they are subjected.' The old stock, which, 'with trifling degrees of difference,' it is said, 'was spread over the greater part of England,' is described by Martin as 'large, coarse, unthrifty, with a long broad snout, large flapping ears, low in the shoulders, long in the back, flat-sided, long in the limbs, and large-boned, with a thick hide covered with coarse bristles. They were enormous feeders but

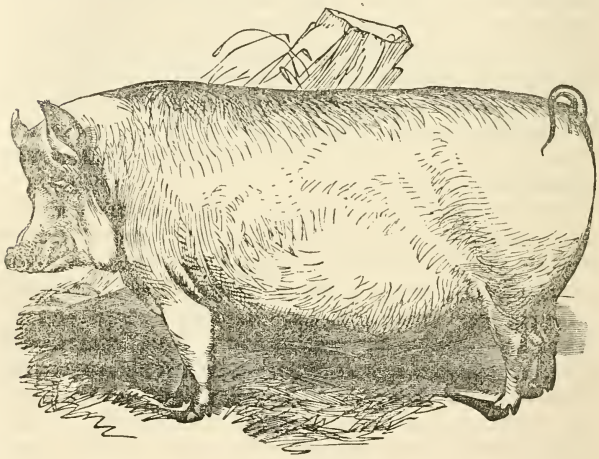
slow fatteners; consuming more food than was repaid by their flesh.' But he observes that the 'general system of crossing now pursued tends to the establishment of a uniform race throughout every country; that is, a race presenting the same outstanding characteristics.'

"Before proceeding to notice the various breeds of swine, it may be observed that the general wants of the community in relation to pork, can be best supplied by two descriptions or classes of hogs; one for supplying the market with meat to be eaten fresh, and for baconing, as above-mentioned, and the other for making fat pork for barrelling, &c. This classification will therefore be adopted in the remarks which follow. Those breeds whose special characteristic is the formation of fat, will be first considered. And, as having been the principal stock in changing the character of the Old English, we will notice first of all,

"*The Chinese.*—There are doubtless various breeds of swine in the 'Celestial Empire.' Specimens brought from that country frequently present so marked a contrast of character that no one would hesitate to pronounce them of different breeds. They vary in size and in color, ranging from white to black. Some of the early importations made to England, and thence to this country, were black; and the idea appears to have been held that this was the invariable color of Chinese swine. Hence Culley, who wrote in the year 1784, speaks of them as 'the Chinese or black breed.' Youatt makes two distinct varieties of the Chinese, the 'white' and the 'black.'* The race, however, in all its varieties, possesses the common characteristic of fattening easily. They are small-boned, and acquire great weights in proportion to the bone and offal. Those brought from their native country seldom have that perfection of symmetry which is most esteemed in animals of this kind, and which the cross-bred descendants soon acquire by skilful breeding. The pure Chinese fatten too much on the belly and too little on the back, and the fat is inclined to be soft and oily. Youatt says, 'they

* It may not generally be known that the progeny of the white hogs transported from Europe and the United States into the tropical regions of Africa and America are usually black, and continue of that color through successive generations. How far this will explain the differences in the color of the Chinese hogs, a series of physiological inquiries can only determine.

do not make good bacon, and are often too fat and oily to be generally esteemed as pork.' The females are sometimes singularly prolific. The improvement which has been effected by means of the Chinese race, has resulted in the first place from lessening the bone and increasing the aptitude to fatten in the stocks with which they have been crossed, and afterwards selecting as a breeding stock such as possessed the requisite points as to symmetry.



IMPROVED SUFFOLK.

"This breed is one of the most highly esteemed and valuable in the world. Its origin, according to Youatt and Martin, is the old Suffolk crossed with the Berkshire and Chinese. Youatt says, 'those arising from the Berkshire and Suffolk are not so well shaped as those arising from the Chinese and Suffolk; being coarser, longer-legged, and more prominent about the hips.' He concludes: 'On the whole, there are but few better breeds in the kingdom than the Improved Suffolk.' He states that the greater part of the pigs at Prince Albert's farm, near Windsor, are of this breed. Martin says, 'this breed stands first,' and he describes the animals as 'rather small, but compact, short-legged, and small-headed; the body is round, and they fatten readily.' Rham, in his 'Dictionary of the

Farm,' says, 'Suffolk pigs are perhaps, on the whole, the most popular of any breed in England.'

"For the introduction of the Improved Suffolk pigs into this country, we are indebted to the late William Stickney, of Boston. He made several importations, comprising some of the best specimens of the breed to be had in England, from 1842 to 1848. He also imported specimens of the Middlesex and of the White Essex breeds. Since these importations, there have been others, and the stock is now bred to a considerable extent in New England, and is rapidly spreading over the country.

"The Suffolks, as before stated, are not large hogs, but attain maturity at an early age, and may be always in condition to kill from the time they are a month old. They readily weigh from 200 to 300 pounds at six to ten months old, and a proportionate weight at twelve months. The pork is so much esteemed, that it generally commands from a cent to two cents a pound, extra, in Boston Market.

"*The Middlesex.* — This appears to be a popular breed in parts of England, and has sometimes carried prizes at the shows of the Smithfield Club. It has been previously stated that Mr. Stickney imported Middlesex pigs into this country. He received a lot in 1844, and another lot in 1848. The breed is evidently derived from a large infusion of the Chinese with some larger stock. Our remarks refer to those introduced here. The color is usually white. The size of the animals is perhaps somewhat larger than the Suffolk, but the carcass is less symmetrical; the frame is more loose, the legs less straight, the knees apt to be turned in, the belly is more hanging, and the general appearance indicating a softer texture of flesh. They fatten easily. They have often been crossed with the Suffolk, but with no advantage to the latter, so far as the writer has seen. The late Mr. Stickney continued the stock unmixed for several years; but it is not known to be so bred by any one in this country at the present time.

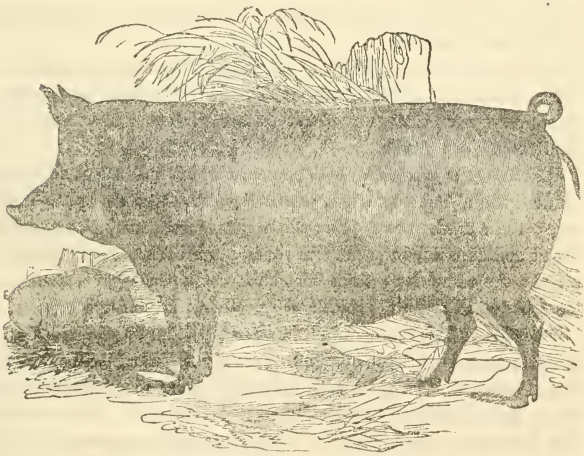
"*The Mackay Breed*, formerly well known in Massachusetts, was originated by the late Captain John Mackay, of Boston. He had a farm at Weston, in Middlesex county, on which he collected many hogs which he procured in various parts of the world, whither he was led in his commercial intercourse. These various kinds were bred together, and the result was the production of a stock to which his name was applied. The writer of this article purchased pigs of

Captain Mackay at various times — first in 1830. It can hardly be said that his stock ever acquired a sufficiently uniform character to justify its being called a distinct breed. Their greatly diverse origin was always more or less manifest. They were, however, very easily fattened and highly profitable. Some inclined to grow to a large size, yet were always fat, from three weeks old, if tolerably cared for; and at eighteen months old sometimes weighed 600 pounds each, and upwards. In the latter part of his breeding, Captain Mackay gave his attention more to the propagation of this larger stock. In 1834, he sold all his swine to Colonel Jaques, of the Ten-Hills Farm, who now has all of this valuable stock within the writer's knowledge. Various circumstances, which it is unnecessary to mention here, have conspired to nearly annihilate them. Colonel Jaques has made extensive inquiries, but can hear of none except those in his own hands.

"The foregoing list comprises most of the breeds which have been regarded as best adapted to the production of 'clear pork.' Other breeds, which form a greater proportion of lean properly combined with fat, may be more profitable for particular situations. In cities and large towns a great quantity of pork is consumed in a fresh state. To be best adapted to this purpose, swine should be small-boned, only moderately fat, but plump and meaty, weighing when dressed from forty to a hundred pounds — the flesh fine-grained, and of the best quality as to flavor. Under this class, and as adapted to baconing, as before described, may be enumerated the following: —

"*The Neapolitan Breed.* — Martin, speaking of the excellence of Italian swine, observes: 'The ancient Romans made the art of breeding, rearing and fattening pigs a study, and elevated, so to speak, various strains to the highest perfection. We cannot doubt that from those improved races of antiquity the present pigs of Italy have descended. It is not, we think, overstraining the mark, to regard the excellent breeds of pigs in Italy as the descendants of a long line of ancestry — of breeds established before Rome fell.' The Neapolitan is the most celebrated Italian breed, and has been the source from whence some of the most esteemed English breeds have been in part derived. They have also been introduced into the United States, but did not prove sufficiently hardy for ordinary management. Their flesh is of very superior quality. Martin's description of the breed is as follows: — 'The Neapolitan pig is

small, black, almost destitute of bristles, and remarkable for aptitude to fatten; it is short in the snout, small in the bone, with sharp erect ears; but it is by no means hardy, at least in our country, and if the sows happen to have litters in winter, it will be difficult, should the weather be severe, to save the young pigs from dying. But as a cross with some of our breeds, as the Berkshire, the Neapolitan race is most valuable. The cross-breed exhibits improvement in form without too great delicacy of constitution; they have a remarkable tendency to fatten, and though larger and stronger than the Neapolitan, display all their good qualities. The Essex breed is much indebted for its excellencies to the Neapolitan intermixture.'



IMPROVED ESSEX.

"This is one of the most valuable breeds now known. Its establishment is generally credited to the late Lord Western. It has of later years been extensively known in the hands of W. Fisher Hobbs, of Mark's Hall, Essex. It has, perhaps, carried more prizes at the shows of the Smithfield Club within the last ten years, than any other breed. As above mentioned, it was derived from a cross with the Neapolitan, and inherits the color of that

race,* with more size, finer symmetry, and much better constitution. Stephens, author of the 'Book of the Farm,' and the 'Farmer's Guide,' says: 'As to the breed which shows the greatest disposition to fatten, together with a due proportion of lean, I never saw one equal to that which was originated by Lord Western, in Essex. They were exceedingly gentle, indisposed to travel far, not very prolific, however, but could attain, if kept on, to a great weight, and so compact in form and small of bone and offal, that they invariably yielded a greater weight of pork than was judged of before being slaughtered. The offal was small, and more delicious ham was never cured than they afforded.' Martin says, 'these animals fatten quickly, grow rapidly, and yield very superior meat. The hogs when fattened will sometimes weigh 26 or 28 stones, (14 lbs.,) often 18 or 20,' equal to 252 to 392 pounds.

"Colonel Lewis G. Morris, of Fordham, Westchester county, New York, has made several importations of this breed, some specimens of which were purchased of W. Fisher Hobbs, and were of that gentleman's best stock.

"*Points of a good Hog.* — The points which indicate the fattening tendency in a hog, are, the head small, with short snout and dished face; the ear small and thin; the neck short and thick; the chest broad and capacious; † the ribs round; the back straight; the loin broad; the rump long from hips backward; the legs straight and tolerably small; the skin soft and smooth, with thin, fine bristles.

"It should be borne in mind, however, that all these points do not indicate an animal best adapted to every situation. The thin skin and absence of bristles, though favorable to the accumulation of fat, when the animal is well sheltered and protected, do not denote the hardiness which may be necessary under exposure. If the animal is destined to support himself in a considerable degree, under the various transitions of weather, instead of the thin hide and scanty bristles of the *refined* varieties, he must be clad in covering which

---

* Though the entire body of the "Improved Essex" is covered with a pigment of black, these swine dress handsome, showing as white and fair a skin as the Suffolk.—Com.

† The writer is aware that Liebig and some others have held that small chests were most favorable to the fattening tendency, but common observation does not support the idea.

will afford the requisite protection against the elements, and the tendency to fatten must, to a certain extent, give way to a habit of activity and a tendency to muscular fibre. Even in ordinary farm-management, there may be too much regard paid to the points which denote a tendency to fat only, to the neglect of those which denote constitution. A proper balance of these must be kept constantly in view, or the stock which will be found most profitable cannot be bred."

PREMIUMS AWARDED.

Best Boars not under six months. — To Dr. W. T. G. Morton, of West Needham, for Suffolk; first premium, - - $6.00

To Richard Richardson, of Medway, for Suffolk, second premium, - - - - - - - - 5.00

H. L. Howe, Grantville, for Suffolk; third premium, - - 4.00

Diplomas were awarded to John Fussell, of Roxbury, for young Essex Boar; George Houghton, of Neponset, for Suffolk; H. L. Stone, of Grantville, for Suffolk; S. J. Capen, of Dorchester, for pair Suffolks, recently imported; and Joseph Mann, Jr., of Neponset, for Suffolk.

Breeding Sows. — To H. L. Stone, Grantville, for Suffolk; second premium, - - - - - - - - - $5.00

To Abner Alden, of Dedham, for Suffolk; third premium, 4.00

Gratuities of $2 to M. P. Wilder, of Dorchester, for Essex and Suffolk cross; and A. D. Weld, of West Roxbury, for China. Diploma to W. T. G. Morton, of West Needham, for Suffolk.

Weaned Pigs. — To Town of Needham, three-fourths Suffolk; first premium, - - - - - - $5.00

To Henry Goulding, of Dover, fifteen-sixteenths Suffolk; second premium, - - - - - - - - - 3.00

To Henry Wood, of West Needham, three-fourths Suffolk; third premium, - - - - - - - - - 2.00

Diploma to Jos. Robinson, of Dorchester, for Suffolk.

Fat Hogs. — To William Flagg, of West Needham, one-half Suffolk; first premium, - - - - - - 6.00

To C. C. Sewall, of Medfield, for Suffolk; second premium, 5.00

EBEN WIGHT, *Chairman.*

Dedham.

REPORT ON POULTRY.

The number of entries was 45, by 18 different persons. But two written statements were presented, and these were not very definite. There were no natives, if we except some geese and turkeys. This should not be. The conditions upon which premiums are offered should positively require statements showing the expenses and income, for at least twelve months previous to their being offered. Then the *number* of premiums should be reduced at least one-half. At the same time the amount should be no less than now offered. The premiums should be offered for the most profitable fowls, without regard to breeds. We have had experience to show that poultry and eggs can be produced at a handsome profit; no part of the State can be more favorable for this business than Norfolk County. We have numerous breeds of fowls from which a good selection might be made; then grain may be raised as cheap as in other counties, and the market is as convenient as we could desire. As population increases, so the price of eggs and poultry increases. Our towns are fast filling up with inhabitants. It is desirable that this branch of business should keep pace with the population, as it will affect both producer and consumer favorably. Feeling that these remarks are called for, we submit them for your consideration.

The following is the list of premiums awarded: —

Nathaniel Dunbar, Canton, for White Shanghaes,	$2.00
Charles Sampson, West Roxbury, Gray "	2.00
J. A. C. Butters, West Roxbury, Black "	2.00
Eliphalet Stone, Dedham, Bolton Grays,	2.00
James Calder, Dedham, Black Spanish,	2.00
C. L. Copeland, Milton, Marsh and Forbes's Shanghaes,	2.00
Daniel McDaniel, Dorchester, Buff Shanghaes,	2.00
George F. Richards, Dedham, Bantams,	2.00
J. S. Drayton, Dedham, Brama Pootras, gratuity,	2.00
Humphrey Smith, West Roxbury, Chittagongs,	2.00
W. T. G. Morton, West Needham, best lot Fowls,	4.00
C. L. Copeland, Milton, 2d best lot Fowls,	3.00
E. Bird, Stoughton, 3d best lot Fowls,	2.00
W. T. G. Morton, West Needham, Ducks,	2.00

W. S. Damrell, Dedham, Geese, ... $3.00
W. T. G. Morton, West Needham, Geese, gratuity, . 2.00
Lemuel Kingsbury, Needham, best Turkeys, . . 2.00
E. Bird, Stoughton, 2d best Turkeys, ... 2.00

ROBERT MANSFIELD, *Chairman.*

Dedham, Sept. 23, 1853.

—※—

REPORT ON DAIRY.

The Committee on the Dairy have attended to their duty, and report: —

That for the best 40 lbs. of Butter presented, the premium of $20 is awarded to Rev. C. C. Sewall, of Medfield.

For the best 20 lbs. the first premium of $10 to same.

For the best Box of 12 lbs. the first premium of $6 to Geo. Crosby, of Medway.

For the second, premium of $4 to J. P. Clark, of Medway.

For the third, premium of $2 to ——, name unknown.

The Committee having had much experience in butter-making, offer the following rules as the result of their experience.

The newer and sweeter the cream, the sweeter and higher flavored will be the butter.

The air must be fresh and pure in the room or cellar where the milk is set.

The cream should not remain on the milk over thirty-six hours.

Keep the cream in tin pails, or stone pots, into which put a spoonful of salt at the beginning, then stir the cream lightly each morning and evening; this will prevent the cream from moulding or souring.

Churn as often as once a week, and as much oftener as circumstances will permit.

Before churning add the cream upon all the milk then in the dairy.

Use nearly an ounce of salt to a pound of butter.

Work the butter over twice to free it from the buttermilk and brine before lumping or packing.

JOHN A. GOULD, *Chairman.*

STATEMENT OF JOHN H. ROBINSON.

GENTLEMEN — Herewith I send a statement of the yield of milk from six of my cows for the year beginning September 20th, 1852, ending September 20th, 1853.

I have selected from my stock such as I intended to keep the entire year; not, however, so much with reference to their milking properties at any given time within the year, as with the view of ascertaining precisely the average yield per day, through the year, of what may be considered good, fair milkers.

Two of them calved in September, 1852; two in December, and two in January, 1853: so that it will be seen that four of them have been in milk only for eight or nine months in the year.

The whole yield has been 16,653 gals., making an average for each cow per day of 7 quarts, 1 pint, 1 gill. The greatest average of any one of the six has been 9 quarts, 1 pint, per day; and the smallest average 5 quarts, 1 pint; all measured by the Beer Measure, about the 20th day of each month, and a memorandum made by myself of the product of each cow, separately. The milk was delivered for the Boston market at an average price of 14 cents per gal., at the barn, which would amount to $582.82, or $97.13 for each cow.

The feed has been, in the winter, the best of English and salt hay (half of each), with half a bushel of brewer's grains per day a part of the time, or, instead of grains, half a peck of corn and oil meal soaked in water twelve hours before feeding. In the summer and fall, no grain, but good pasturage, with a plenty of green corn fodder. They have received no better attention than the balance of my stock, all having been fed with the same quantity and in the same way.

My rule is, when feeding from the barn, to have them fed and milked about the same time each day: say hay three times, grain twice, and water three times, the last watering at 8 o'clock in the evening, which I consider very important. In winter my milch cows are kept for the most of the time in the barn, often, in very cold weather, for two weeks together.

The cost of keeping, at the present high price of hay and grain, may, I think, be put down at about $2.25 per week, from November

to June, and the rest of the year at 50 cents; making the whole cost for the year about $75 per head.

As such a difference of opinion prevails as to the average yield of milk from a stock of cows, I have ventured to present somewhat at length the particulars herewith submitted, and if in the opinion of the Committee they are considered of any importance, they may be disposed of in such way as is judged best.

Very respectfully,

JOHN H. ROBINSON.

To the Committee on Dairy.

Dorchester, Sept. 21st, 1853.

REPORT ON BEES.

The Committee on Bees report, That the honors of office were more in the outward show, than the substantial fact. The Society placed no premium at their disposal, and, therefore, the provocation to competition was very small, and the labors of the Committee were not at all onerous.

One hive of Bees was presented by a gentleman not residing in the County. It was the only hive. We liked it much.

There is less *furor* for raising Bees in the County, than in the Bees when they are raised. We have been *penetrated* with the conviction that they are a dangerous fraternity, and, in two important particulars, are obnoxious to the laws of the land.

Chap. 126, sec. 45, of the Revised Statutes provides, "that who shall wilfully commit any trespass, by entering upon the garden, orchard, or other improved land of another, without permission of the owner thereof, with intent, &c., shall be punished by imprisonment in the County Jail .... thirty days, and if the offence be committed on the Lord's day, the imprisonment, &c."

Chap. 134, sec. 16, provides, "if any shall go armed with a dirk, dagger, sword, &c., &c., he may be required, &c."

That portion of our fellow citizens of whom we speak are verily guilty of the violation of both these provisions. They steal remorselessly, and that too of the choicest, of our fruit, and particularly on

the Lord's day, and carry "concealed weapons," in total disregard of the proprieties of life. Now, whether our friend, Mr. Mann, the jailer, would recommend the penalty of imprisonment in the County jail, for thirty days, we are not prepared to answer. And however true, generally, it may be that "misery loves company," we have some doubts whether those already under Mr. Mann's care would desire such an addition.

Your Committee think that the clover fields of New Hampshire present attractions worthy of the consideration of the Bee, and, therefore, respectfully suggest that inducements be offered for their emigration.

A *few* hives in a thickly settled village will do very well; *many* are an evil to fruit and fingers, against which we should sedulously guard.

For the Committee,

S. B. BABCOCK.

November 17, 1853.

REPORT ON ROOTS AND VEGETABLES.

The Committee on Roots and Vegetables report, That the premiums offered by the Society for the best conducted experiments in raising different Vegetables, do not seem to have attracted the notice of cultivators, inasmuch as, among the great variety exhibited, in one case only has any statement of the mode of culture, or quantity produced, been submitted. There was a great variety of the potato, but the scantiness of the information, as to the properties of the new varieties, both in regard to quality and quantity, prevented your Committee from awarding the premium of the Society, intended as an encouragement to experiments in the cultivation of this invaluable root. The same remark will apply to the whole eight premiums. There was a very handsome collection of garden vegetables, from various sources, and your Committee had no hesitation in awarding the Society's first premium, a silver cup, to Mr. C. L. Copeland, of Milton, for a very fine variety of vegetables.

The second premium, for the same, to Mr. B. V. French, of Braintree.

The premium for the best collection of potatoes, to Mr. C. C. Sewall, of Medfield.

The premium for the best conducted experiment in raising carrots is awarded to I. H. Meserve, Brook Farm, Roxbury.

The cultivation of Vegetables in our County is greatly stimulated by our proximity to the metropolis, and the large towns in its vicinity. No branch of husbandry proves so profitable as this, where it is conducted by intelligence and experience. There are many instances, in this County, of large families raised, educated, provided with patrimonies, vigorous health, and habits of industry, from the operations of vegetable culture. The sales from a dozen acres of highly cultivated land, devoted to garden vegetables, will exceed the income of several large farms cultivated in the ordinary way. The market is never overstocked, and often its deficiencies are supplied from distant States. Success in this calling depends on knowledge; and an apprenticeship to a skilful vegetable gardener is a pursuit worthy the attention of our young men.

For the Committee,

JAMES M. ROBBINS.

STATEMENT OF MR. MESERVE.

Brook Farm, Nov. 12, 1853.

To the Committee on Root Crops:

GENTLEMEN — The ground on which I raised Carrots this year, and offer for a premium, measured one acre, of a light loamy soil; I spread, last spring, about four cords of compost of hogs' manure and meadow muck; ploughed it twice; harrowed and sowed on a level surface, the 24th of May, with a seed sower; I weeded them three times; I commenced harvesting the 5th of November; the acre produced 18 tons.

EXPENSES.

Four cords manure,	$16.00
Ploughing and harrowing,	6.00
Sowing and seed,	2.50
Weeding, &c.,	10.00
Harvesting,	7 00
	$41.50

VALUE OF CROP.

18 tons Carrots, at $12, - - -	$216.00
Expenses, - - - - - -	41.50
Net profit, - - - - -	$174.50

The work was mostly done by the inmates belonging to the institution, but I have charged for their labor about what I think would be the cost.

Most respectfully submitted,

ISAAC H. MESERVE,

Superintendent of Roxbury Almshouse.

This is the fourth year that I have cultivated carrots on the same piece of ground. It has never produced less than 15 tons to the acre. It is also set to an orchard of apple trees, which are in a flourishing condition. I have spread about the same quantity of manure each year, and the ground is in good condition for a crop of carrots next year. I. H. M.

This is to certify, that I measured off one acre from a piece of carrots on Brook Farm; I also measured six hundred and thirteen baskets from said acre; I weighed three baskets, which averaged fifty-nine pounds to the basket, making eighteen tons one hundred pounds. DAN T. BOYNTON.

REPORT ON FRUITS AND FRUIT CULTURE.

According to the old Hebrew story, man was placed in a garden to till and to keep it, and man will never be contented and happy till he gets back into a garden again. The tales of the gardens of Alcinöus and the Hesperides prove to us that, even in ancient times, men connected the golden age with golden apples, and put Paradise always in gardens. And, with the coming of the future Paradise and the bright millennium of human hopes and aspirations, there is always associated the thought of the whole earth as one great garden of beauty and "delight" — (the translation of the word "Eden") —

abounding everywhere with luscious fruitage, and wreathed with sweetest flowers. This hope is the ultimatum of all outward culture, the crowning point of all outward earthly bliss. Even the ancient prophet places his joyfully anticipated millennium in a garden, when he predicts that "the wilderness and solitary plain shall be glad, (or fruitful,) and the desert shall rejoice and blossom as the rose."

In the progress of that civilization which is to beautify, perfect, and bless the earth, first comes the wilderness, with hunting and fishing, and an immethodical, careless, half-savage cultivation of the soil; next, the farm, with its careful system and abundant products; and lastly, and *finally*, the garden, with its various and delicious fruits, fit food for the immortals. And, if the civilization of our own land and the world at large is to be judged by its gardens, or even by its systematic and well-tilled farms, we can hardly yet be regarded as having emerged from the original wilderness.

Every friend of culture cannot but earnestly feel that the end and aim of all outward civilization, is to bring back to man the ancient Paradise; and a desire to feed again on the fruits that nourished his joyful days of primeval happiness, gives him no peace, till, lo! again the vines and the orchards gladden the hill-sides, and the trees, bending down with their golden, perfumed bounty, win him back to the bliss of Eden, that seemed once to have forsaken the world forever.

The table of refined civilization is not a table of the hunting ground, the wilderness, or even of the farm only; but of the garden. Think, for a moment, of the ancient Adam — the primitive man of Chaldee story — his hands dripping with gore, slaying and dressing a fattened ox, or an overgrown swine, while the lovely Eve, with smirched and greasy fingers, is peppering the roasting spare-rib on the Paradisial hearth. How much more delicate, refined, and beautiful — how much more inviting and seductive — a table covered with melting and delicious strawberries, with gushing raspberries sending forth their delicate aroma, and fair bunches of the ruby cherry; or crowned with delicious downy peaches, luscious golden pears, or glowing apples with their shining waxen surface, and transparent clusters of rich luxurious grapes with their "purple light," not to speak of the various spring melons, and countless lesser fruits.

I am aware that in a report of a Society, distinguished by having Marshall P. Wilder for its President, and including among its mem-

bers men like B. V. French, Sam'l Walker, E M. Richards, Sam'l Downer, Jr., &c., all hardly less accomplished and famous in the annals of American Fruit Culture, — it may seem superfluous, as well as presumptive, to urge any reasons for the more extensive cultivation of fruit in our county. And yet, no true friend of culture and his race can ever rest content, while the blessings that result from such culture are restricted to the refined or wealthy *few* among us; or be willing to cease his efforts in the divine and glorious cause, till, from a costly luxury, fruit comes to be a cheap and *universal comfort* — one of the very *necessities* of life. Aye! he would labor by word and by deed — by the dissemination of sound information, and through the influence of example, till the poor man's table shall be loaded with these luscious productions, and the child of the humblest citizen shall be blessed by their abundance.

The arguments in favor of universal fruit culture are so various, as well as so powerful, that we can allude to only a few of them here. And we fear, that, with all efforts, — so rapid is the increase of the non-producing *consumer* over the *producer*, — it will be long, very long, ere the market price of fruits will be such as not most fully to remunerate the wise cultivator.

And, First, — People of all ages and conditions of life enjoy the delightful refreshment that the juices of fruits bestow, even those who, not being cultivators themselves, vainly pretend to care little for such things. Such men will eat their neighbor's fruits fast enough, and, when they enter your house or grounds, do not heed their professions or their pretence of a distaste for fruits. Do not imagine that you will *save* your reputation, and *pears* and *apples* too, by offering to them such dainties. Second, — The fondness for the various unwholesome *imitations* of fruits, such as cakes, custards, pastries, and confectionery, not only indicates a love for the real article, but the displacement of these vile and noxious compounds would doubtless have a most beneficial effect upon the *health* of our people; for there is no diet so salutary, so refreshing and delightful, both to the young and the old, as ripe fresh fruits. Indeed, there are not a few *diseases*, for which fruits are the best remedy. Those whose *breakfast*, or first food in the morning, is of fresh fruits, seldom or never suffer from dyspepsia, constipation, inflammation, or bilious complaints of any kind. The acid of fruits is a panacea for scurvy and eruptive disorders. Ripe peaches are found to be a specific in

summer complaints; and the juices of all fruits tend to drive humors to the surface, and to purify the blood; and whole families with scrofulous tendencies have been saved and restored to blooming and elastic health, by returning back to the simple fruit diet of nature. In these respects, fruit is the antipodes of the *mineral potash poison* that, in the form of *saleratus* and *soda*, is destroying the teeth, stomach, and tissues of those of our countrymen who use such an uncivilized diet. The principal element of the bile is a sodaic alkali, and the natural acids of fruits stimulate the secretions of the gastric juice, and, by uniting with the alkaline secretions of the liver, purge the stomach and bowels of any excess of bile, cleanse and purify the whole system, and render all its secretions and motions natural and healthful. Carry the puny children of our towns and cities, who have been brought up on a miserable regimen, principally of meats, cakes, and teas, into the free, open country, to feed on berries and fruits, and they soon pick up and grow plump, rosy, and hearty. Oh! how the meagre, wizened, pale-faced little ones of the street leap with joy at the sight of the glowing peaches and shining apples, bottling up, in their beautiful perfumed skins, more potent medicines than any apothecary's shop can boast, as curative as they are grateful. Third,—Doubtless dram-drinking and *intemperance* itself would be infinitely lessened, if not utterly banished from our soil, by an abundance of fruits; for the love of wines, cordials, ardent spirits, and liquors, is but a corruption of the true and natural taste for the juices of fruits; and it has been often noticed, that those addicted to the excessive use of such drinks are extremely fond of fruits by nature; and only give such an abundance of fresh wholesome fruit, and they will soon banish their wines and liquors, and various poisonous spirituous mixtures. Fourth,—Again, the philosophy of *specifics*, which is but just in its infancy, even in its application to the vegetable world, will, ere long, be seen to be equally applicable to the animal organization; and it will be found that, while potatoes, cabbage, &c., tend to muscular development, as instanced in the Irish and in the Dutch, the hull of corn and grain contributes to the bones, and their flour to the substance of the brain—*fruits* feed the *nervous tissues* and the spiritual body, and produce a mental elevation and harmony, and an exhilaration of spirits, that give a perpetual serenity, peace, and joy.

Such are some among the many reasons, beside the continually

increasing pecuniary compensation to the intelligent cultivator, why we would urge the universal culture of the various garden fruits in their succession, till our fruit rooms shall be as common as cellar or pantry; our drawers of grapes and pears for winter use, shall be more universal even than our good stores of apples now; and the time come when the poorest and humblest man, from his little plat of ground, may nourish and delight his little ones, the year round, with the luxury of successive fruits, grown to be a necessary comfort.

And to this end it might be well for Agricultural and Horticultural Associations, not only to distribute in their counties and towns the best seeds, the finest and most profitable scions, plants and trees, grown to that end; but — what is of equal, if not greater importance — to disseminate, by publications and by *lectures* before Lyceums and *Agricultural Clubs*, a knowledge of the correct principles of fruit culture, — a subject concerning which we can only drop a few hints in conclusion.

In the *first* place, it must be borne in mind, that, as in all culture, so most especially in fruit culture, is *deep tillage* the *sine qua non;* that trenching, subsoiling, and double-spading are absolutely essential to enable the roots to run down into a mellow rich soil, and thus produce an abundance of fair, large, and luscious fruitage. A neighbor of ours feared that he should lose a favorite pear tree, because one of his workmen dug a great trench by its side, in which to bury his cabbages for the winter. In place of receiving any injury, however, the tree was stimulated to a new growth and a most prolific production of fruit of uncommon size and flavor; and the next year, of course, saw our friend trenching for pears himself. In setting out an apple orchard, or a few pear trees, there are many who will but just hoe a hole in the ground large enough to bury a cat in, pop the roots into it, and, as the trees dry up and die, have the impudence to say, "Oh! we never had any *luck* with trees." We always give thanks when any of our friends, who have the folly and the cruelty to deal thus with their trees, lose them; for they ought to die, and it is only a just retribution.

Secondly. — The *proper enriching* of the soil, thus deeply tilled, is of hardly less importance. A tree can no more grow without its appropriate food, than a man can. And it is the salts of earths and manures, dissolved in water, that feed the roots of trees. There are

those who plant out their trees in *impoverished soil*, or *mere sand or gravel*, without giving them a jot of other nourishment, as though they could live and grow without any rich, good soil, any more than oats or wheat can. No man of common sense, one would think, could expect to grow good, fine, juicy apples out of mere gravel-stones. There are others, who set out orchards in a *green sward*, and this, we think, is the *most common of all blunders* in orcharding. They thus allow the sod to grow tight up about their very stems — they never come to have trunks — and then complain "that the soil in their part of the country is n't at all suited to fruit trees." Why, what would they think of a man who should plant a corn-field in the grass? How much of the sun, and air, and rain; how much nutriment from the earth, that is acted on and fertilized by the sun, and air, and rain, would the roots of the corn or the trees get?

Thirdly. — The trees must not only be fed, but every tree must have *its appropriate nourishment*. Here the law of *specifics*, which is just beginning to receive the attention of scientific cultivators, comes in play. Thus, it is found that one kind of nourishment conduces to the growth of foliage and wood, another tends to fruit; and while one kind of plant or tree requires one peculiar element for its sustenance, another demands a far different element. For example: lime is a great absorbent of acids, and thus materially assists in the elaboration of the juices of fruits; this is particularly observable in the apple tree, the bark of which is half made up of the lime which it has thus thrown out of its circulation as useless, after it has employed it in its vegetable economy. To all trees, doubtless, a vegetable substratum of soil is necessary, composed of decayed wood, grasses, leaves, — like pond mud, peat earth, heath moulds; but with this alone, without ammonia, or the sulphates and phosphates, or lime, to absorb and retain these, the fruit may be large and perhaps fair, but it will often be rough, coarse, and astringent on the one hand, or flat and tasteless on the other. A pear or apple in cold, clay soil, for example, is found to be a very different thing from what it is in a warm, loam, or sandy land. And, although the science of speficics is now in its infancy, and it may be difficult for some accomplished cultivators even to decide in regard to the best soil and culture for various and different plants and trees, yet it will, we think, be safe to say — 1st. That *wood ashes*, containing, as they do, all the elements necessary to their growth, save carbon, (that is

supplied by the air,) are a specific for *all trees and woods*. 2d. That *lime*, whether in the form of marl, shell, plaster, or stone lime, is a specific for *apple trees;* and that apples are fairest and largest grown in a calcareous soil. 3d. That *phosphates*, in the form of bones, (which are principally made up of phosphate of lime,) mineral, or rock phosphate of lime, or prepared superphosphate,* are specifics for *pears* and *grapes*. 4th. That *ammoniacal* manures, as guano, horse dung, urine, are specifics for the *peach*, and give *flavor* and *spirit* to all other fruits.

Care should be taken to avoid the common fault of setting trees *too deep*, so that, to live and flourish, they are compelled to form new roots above the old.

Proper *pruning* is another important consideration in this connection. All trees should be *shaped* when they are *young*, so as to avoid the injury and unsightliness of mutilating large limbs when they are grown. *Dwarfs*, like hedges, should be pruned *pyramidically*, so that the lower limbs may not die out, and the sun, air, and rain may have access equally to the under as the upper branches. *Peach* trees, especially, need to have a large part of the spring growth cut in *June*, and a *second* pruning in *August;* this *double pruning* will throw the sap into fruit buds, make the tree stout and strong, and able, even when loaded, to resist the winds; and, in place of a few etiolated and drawn out branches, will cause a thick growth, that will carry the fruit-buds back near to the trunk; and the short, well-ripened wood, will withstand the winter frosts better, as well as the summer tempests. In this way, and by keeping a little heap of coal ashes round the butt, to keep out borers, a crop of fruit will be always sure. *Grapes* and *peaches*, to produce *fruit* instead of leaves and wood, need constant and *thorough pruning*.

A mere allusion to the subject of mulching will conclude these hints. Though a matter that has received too little general consideration, yet, years ago, attention was called by the writer and others, in Horticultural and Agricultural periodicals, to the importance of mulching trees, shrubs, plants, &c.; in other words, of covering the surface of the soil, around their roots, with light, porous

---

* Prof. Mapes's is most valuable, as it contains guano, and is thus richer in ammonia.

substances, as hay, leaves, straw, chips, shavings, sawdust, and even shells. The vast benefit of this operation will instantly be seen, when we reflect that *the food of plants is always liquid;* that their nutriment is sucked up by the mouths of the little spongioles at the end of the radicles or little roots, in the form of water that has absorbed the nutritious elements of the soil; and that when — as is apt to be the case in our periodical New England droughts — the *ground becomes parched*, the trees not merely become dry, but *are absolutely starved;* — and thus mulching, by preventing the evaporation of the moisture in which the food of plants is held in solution, keeps them always well fed, prevents the fruit from being checked in its growth, and so becoming stinted and knarly in its appearance, or falling prematurely; and, by affording a constant flow of sap, gives the rejoicing cultivator an abundance of fair, large, and juicy fruit from stalk, and bush, and vine, and tree.

All which is respectfully submitted, by

JAMES RICHARDSON, Jr., *Chairman.*

Dedham, Nov. 17, 1853.

REPORT ON FLOWERS.

The Committee notice, with satisfaction, the interest felt by this community in the cultivation of flowers, attested by the present exhibition. It indicates the growth of a pure taste, and of a delight in simple pleasures. The culture of garden and house plants is a healthy occupation, and a cheap enjoyment; while the variety of their forms, and the gradual development of their colors, the mysteries of their birth and growth, offer instructive topics of contemplation to the most cultivated understanding.

We are gratified to know that so many of the flowers presented for our inspection, have been trained by the hands of women; for there is no amusement more adapted to the position and character of our wives, sisters, and daughters. It interferes little, if at all, with their domestic pursuits, while it adds new charms and attractions to their homes.

The culture of flowers also awakens an interest in scientific truths and processes, leads to inquiries and experiments, and thus enlarges the limits of knowledge. While it increases our attachment to the soil and to our homes, it raises our thoughts to the Providence through whose beneficent arrangements the earth produces such varied forms of beauty, gratifying at once the senses and the soul.

Even in their decline, the faded blossoms and withering leaves bring the ripened fruit of a sad pleasure. If they remind us of a delightful past now vanished, like their own brief beauty, they bid us be thankful for what we have enjoyed; and if they admonish us of frailty, they also speak of a new spring and of brighter hopes. Therefore we welcome those evidences of a pure taste, as a contribution towards a better civilization.

The Committee award the following premiums: —

To Lewis Davenport, of Milton, for the best collection of roses and cut flowers, - - - - - - - - $3.00

To James Richardson, Jr., of Dedham, for Dahlias and Verbenas, - - - - - - - - - - - - - 2.00

To Miss Mary R. Richards, of Dedham, for bouquets and for one Salvia Splendens, - - - - - - - - 2.00

To each of the following persons $1, for flowers, viz.: — Miss Hannah Chickering, of Dedham; Miss Delia White, of West Dedham; Mrs. Ellis Bacon, of Walpole; Miss Myra Smith, of Needham; Mrs. Mackintosh, of Needham; Mrs. Mary Carleton, of Dorchester; Mrs. Mary Emerson, of West Dedham.

The Committee acknowledge the receipt of beautiful bouquets and cut flowers from Messrs. B. V. French, E. S. Rand, M. P. Wilder, J. W. Clark, and several other persons whose names are not known to us. These were given for the purposes of ornamenting the rooms, and increasing the proceeds of the Ladies' Fair.

For the Committee,

JOHN M. MERRICK.

REPORT ON LADIES' WORK.

The Committee on Ladies' Work have attended to the duty assigned them, and report: —

That the Work offered for exhibition and premium is inferior in every respect to that offered the preceding years. It is the opinion of the Committee, that this is owing, in some degree, to the lavish bestowal of premiums, gratuities, and diplomas, every year since the formation of the Society: they have been so easily obtained, that they are not worth contending for by persons who might produce articles really useful or beautiful. The Committee suggest, that it would be better not to award premiums or allow a free ticket for articles more than once offered. This would afford a greater stimulus for some new effort of ingenuity, and might elicit something original, as well as useful.

It is the opinion of the Committee that ladies are not invited or encouraged to offer the description of work which would be best worth seeing, and most creditable to them to perform. It seems not right to bribe women to spend time, strength, and eyesight on work useless to others, and worse than useless to themselves. Specimens of lace work have been offered, which, although very beautiful, could not be done without materially injuring the eyes of the person by whom they were wrought. Yet they receive a gratuity, which is an invitation to them to bring more of the same kind. A premium is likewise offered for the work of children, of which the Committee cannot approve, thinking, as they do, that the time allowed children out of school hours is too short for their necessary exercise and play, and that therefore it is injudicious to tempt them by the offer of a dollar to devote their play hours to work. The Committee would respectfully suggest, that premiums should be offered only for work which is really useful or really beautiful: — For well-made garments, of every description; for stocking knitting, of cotton, wool, and silk; for bonnet and cap making; for all articles worn by children, well made, or tastefully embroidered; for patching, mending, and darning; for designing, drawing, and painting, in oils or water colors; for models in wood, plaster, or marble.

The Committee feel that the standard of woman's labor needs to be raised, and would therefore earnestly invite the ladies of the

County to interest themselves in this branch of industry, and send articles, combining beauty and utility, to the exhibition which shall not only be creditable to themselves, but calculated to refine the taste, and open new channels of activity and usefulness to many who wish to secure to themselves an honorable independence.

For the Committee,

MRS. W. R. SUMNER.

REPORT ON BREAD.

The Committee on Bread having attended to the duty assigned them, beg leave to make the following Report:

There were offered for premiums

Of Wheat Bread,	18	specimens.
Of Wheat and Indian,	2	"
Of Unbolted Wheat,	1	"
Of Rye and Indian,	10	"

Your Committee adjudged the first premium for the best loaf of Wheat Bread, — Three Dollars, — to Miss Mary F. Hollis, of Braintree:

And the second premium, — Two Dollars, — for the next best loaf of Wheat Bread, to Mrs. J. D. Howe, of Dedham.

For Wheat and Indian Bread, we adjudged a second premium, — Two Dollars, — to Sarah Davenport, of Milton.

For the best loaf of Rye and Indian Bread we adjudged the first premium, — Three Dollars, — to Mrs. P. Ruggles, of Milton:

And the second premium — Two Dollars, — to Miss Amelia Hunt, of Medway.

Your Committee would state that several loaves of excellent bread were not admitted to competition for premiums, because the condition that the Bread offered should be made on the day previous to the Exhibition, had not been complied with.

All which is respectfully submitted.

For the Committee,

EDMUND QUINCY.

REPORT ON AGRICULTURAL IMPLEMENTS.

The Committee on Agricultural Implements report that it is due to Mr. Henry Partridge, Jr., of Medfield, that the Exhibition was not perfectly barren of those articles which most appropriately symbolize the great science of Agriculture, and which, as much as any thing, mark its progress and contribute to its success, and they award to him the two premiums for which he contended, viz. : —

For the best and most extensive collection of Agricultural Implements, first premium, - - - - $15.00

For the best assortment of implements made in the County, first premium, - - - - 6.00

The articles constituting the largest collection, were gathered in one of the city warehouses, and comprised a sample of the ordinary implements of Agriculture, such as have been in common use. The premium was offered to induce manufacturers and dealers to add to the interest of the Exhibitions by presenting articles so intimately connected with agriculture, and so indicative of the progress of the art.

The changes and improvements which have been made in agricultural implements in the space of ten or twenty years are marked and significant, but from year to year it is difficult to discern, in the ordinary implements, any remarkable alterations. In the annual list of patents there are many in the Agricultural Department which are designed chiefly for the sections where farming is done on a far larger scale than here, in New England. The character of our soil, and its rough and uneven surface, obstruct the operation of those labor-saving machines, which have been so extensively introduced into the Western States, including, also, the State of New York.

During the year 1852, letters patent were granted for inventions and improvements in agricultural implements in number as follows — Churns, 9 ; Corn Shellers, 2 ; Cultivators, 3 ; Grain Separaters, 4 ; Harvesters of grain and grass, 20 ; Hoes, 1 ; Hullers of rice and buckwheat, 3 ; Seed Planters, 24 ; Ploughs, 14 ; Potato Diggers, 2 ; Potato Washers, 1 ; Rakes, 4 ; Straw Cutters, 4 ; Threshers, 4 ; Winnowers, 4 ; Ox Yokes, 3, and some others ; and among all the hundred patentees, not more than two or three are from the State of Massachusetts, and not more than six from all the other New England States.

By reference to the catalogue of the machines and implements on exhibition at the Crystal Palace, it would appear that, at last, even in the Agricultural Department, labor was about to be nearly all performed by the power of steam or the strength of animals, and that intellect and intelligence, and not muscle, are to be the chief capital of the farmer.

An unnecessary alarm was excited some years ago lest the multiplication of substitutes for human labor would so cheapen it, that men would find it difficult to gain employment, and if they should chance to find it, the wages would be too little to support them. The prospect of a railroad from the West, sent terror at one time into the breasts of our farmers, lest the cheap productions of the prairies should render those of their own soil valueless; but fears of that description have long since vanished. The more railroads, and the more labor-saving machines, the higher the prices of agricultural products. It was not uncommon to find flour selling sixty miles from the seaboard, in Massachusetts, twenty years ago, at $5.50 per barrel, while at the same place at this time it will bring $3 more, notwithstanding all the improvements of modern times. There is no danger, therefore, that the products of agriculture will suffer for the want of purchasers, until a new order of things shall dawn, but, on the other hand, there is danger, that owing to the facilities afforded to speculators, we shall be forced to pay starvation prices for provisions, while cargoes of flour and corn, of American growth, are selling at half price, or moulding in the overburdened ports of Australia and California.

E. L. KEYES, *Chairman.*

—☼—

REPORT ON STRAW GOODS.

Your Committee on Manufactures of Straw have to regret that so little interest is taken in the exhibition of that article, as Norfolk County is *the* great centre of the manufacture of Straw Goods in New England.

Your Committee beg leave to make the following report, viz.: —

There were but two specimens of Straw Bonnets exhibited, neither

of which did your Committee consider worthy of the *first* premium; also, there were but two specimens of Straw Braid exhibited, — neither of which were considered worthy of the *first* premium.

Your Committee therefore award for best seven braid Bonnet, the second premium of Six Dollars to Messrs. Metcalf & Daniels, of Medway.

For best specimen of Seven Braid, the second premium of Two Dollars to L. G. Baker, of West Dedham.

In behalf of the Committee,

H. C. FISHER, *Chairman.*

—☼—

REPORT ON CARRIAGES.

The Committee on Carriages have great satisfaction in announcing that one was entered for exhibition and premium by Cushman & Baker, Medfield. It was a light express wagon, and on a thorough examination it was found to be of superior workmanship, and a premium of Five Dollars is awarded.

HENRY PARTRIDGE, Jr.
FREEDOM GUILD.

—☼—

REPORT ON CLOTH, FLANNELS, HOSIERY, WOOL, CARPETINGS, &C.

The Committee on Cloth, Flannels, Hosiery, Wools, Carpetings, &c., make the following awards: —

To Messrs. Tuck & Hodges, Stoughton, for Woollen Yarn, a premium of $1.00

To Messrs. Tuck & Hodges, Stoughton, for Ladies' Hose, a premium of 1.00

To Timothy Phelps, Dedham, for Moleskin Hats, a premium of 1.00

To Lemuel Kingsbury, Needham, for Glue, a gratuity of 1.00

To Boston Carpet Co., Roxbury, for samples of Carpeting, Society's diploma.

To James Daniels, Medway, for Whipstocks, a gratuity of $1.00
To William G. Woods, Dedham, for samples of fretwork, a gratuity of 50

For the Committee,

E. W. TAFT, *Acting Chairman.*

—⁂—

REPORT ON LEATHER.

The Committee on Manufactures of Leather award to Messrs. Holbrook & Thayer, Bellingham, the first premium on thick Boots, of $2.00
To James Pitcher, Canton, for best specimen of Calfskin Boots, 3.00
To William C. Daniels, South Braintree, specimen of Boot Fitting by machinery, gratuity, ... 1.00
To Messrs. Dicker & Cotton, of Stoughton, for specimen of French Curried Leather, gratuity, . . . 1.00

For the Committee,

A. W. WHITCOMB.

—⁂—

REPORT ON SUNDRY MANUFACTURES.

Your Committee exceedingly regret that so few articles for which a premium was offered, belonging to more than *twenty* different branches of manufacture, were entered for a premium, or exhibition, viz.:

3 "Ratchet Drills" (a very useful article where the "Press" or "Lathe-Drill" cannot easily be applied,) were entered by Charles B. Crossman, of Dedham, for which the Committee recommend Diploma.

One set each of Horse and Ox Shoes were entered by John C. Hewins, of Dorchester; and in the examination of these last named articles, your Committee came to the conclusion that where the *file* is substituted for the *hammer*, in finishing so plain and common an

article, that no great ingenuity is manifested or benefit derived by such a process, and therefore do not award any premium or gratuity.

For the Committee,

LUTHER METCALF, *Chairman.*

Sept. 27, 1853.

REPORT ON FRUIT TREES.

The Committee on Fruit Trees report, That two Orchards of Apple Trees were offered for premium, viz., one by Abner L. Smith, of Dover, the other by Artemas Aldrich, of Wrentham.

The Orchard of Mr. Smith, the Committee did not think came within the pale of the Society's regulations respecting premiums.

The Orchard of Mr. Aldrich consists of one hundred and fifteen trees, *one hundred of which are Baldwins.* Considering the unfavorable character of some portions of the land upon which these were planted, and their present thrifty and vigorous condition, the Committee are of opinion that, for the judicious management of this orchard, Mr. Aldrich is entitled to the First Premium. They therefore award to Artemas Aldrich the premium of FIFTEEN DOLLARS, for the best Apple Orchard, planted since the year 1848, of not less than *seventy-five trees.*

MARSHALL P. WILDER, *Chairman.*

STATEMENT OF MR. ALDRICH.

To the Committee on Fruit Trees, &c.:

GENTLEMEN — The Orchard which I present for premium was planted in April, 1849. It consists of one hundred and fifteen trees, and, although the following summer was very dry, I lost but one tree, having occasionally watered them during the severe drought. The ground has been ploughed on each side of the trees, and planted with potatoes, squashes, beets, and the like. On the most gravelly part of the land, I have mixed in around the trees a compost of meadow mud and ashes. On the back part of the orchard I planted

corn one year, and the next year I sowed it down to winter rye, which crops, I think, did not suit the young trees; consequently this part of the orchard has not done so well as the other.

ARTEMAS ALDRICH.

Wrentham.

REPORT ON GRAIN CROPS.

The subjoined papers are submitted with much satisfaction, affording, as they do, gratifying evidence not only of the increasing interest and skill of the farmers of Norfolk County in the cultivation of grain, but also of the feasibility of our soils for this purpose, and of the large profits resulting from these experiments.

The Committee make the following awards: —

On INDIAN CORN — The *first* premium of $8 to Luther Gilbert, of Needham, for his crop of 129 16-56 bushels to the acre, and which, valued at 90 cents, produces a profit per acre of $86.07.

Do. do. The *second* premium of $5 to Benj. N. Sawin, of Dover, for his crop of 94 5-7 bushels to the acre, and which, valued at $1, produces a profit per acre of $72.81.

Do. do. The *third* premium of $3 to John R. Dow, of Milton, for his crop of 109 bushels to the acre, which, valued at $1, produces a profit of $67.45.

A gratuity of $3 is recommended to I. Meserve, West Roxbury, for his crop of 105 bushels to the acre, which, valued at $1, produces a profit per acre of $65.25.

A gratuity is also recommended to be given to Philemon Ruggles, of Milton, for his crop of corn on 133 rods, being at the rate of 117 bushels to the acre, which, valued at $1, produces a profit per acre of $68.33.

Also a gratuity of $2 to Robert Mansfield, of Needham.

On WHEAT — The first premium of $6 to Horatio Mason, of Medway.

On RYE — The first premium of $4 to Benjamin F. Dudley, Milton.

On WHITE BEANS — The first premium of $6 to Benjamin N. Sawin, of Dover.

On BARLEY — The first premium of $4 to Horatio Mason, of Medway.

J. P. JONES, *Chairman.*

STATEMENT OF LUTHER GILBERT, OF GRANTVILLE, NEEDHAM.

To the Committee on Grain Crops:

GENTLEMEN — The Field of Corn entered by me for premium, contains two acres: the soil is a black loam generally, and part of it mixture of gravel. The condition of the field was poor; it was sowed down to grass in the fall of 1846 without any manure; it has been in grass ever since, until September, 1852, when I had it broke up about ten inches deep. The manure used on this field was a compost made entirely, between the 18th of November, 1852, and the last of April, 1853, from one horse, one cow, and sods taken from the above field and composted in my barn cellar by my hogs. As the bulk of the manure was taken from the same field to which it was returned, I shall only estimate the value of the horse and cow manure, the use of the hogs for composting, and the carting the sods into the cellar, as that was the only cost to me. The compost was carted directly from the barn cellar, (without turning over,) about the last of April, and spread as even over the whole field as it could well be, and immediately ploughed in. The quantity spread in this way was about sixteen cords to the field, (or eight cords to the acre;) it was then harrowed and furrowed both ways, three feet four inches one way, three feet the other. There were about two cords of scrapings of the cellar put in the hill; on such parts of the field as the soil was poorest, one shovelful in the hill. On the 10th and 11th of May I planted it with the Plymouth County corn, putting six to eight kernels to each hill; cultivated and hoed it twice, taking out all but five, and sometimes four, stalks at hoeing time.

On the 18th of October, the Society's Committee, after examining the whole field, selected two places in separate parts of the field, and measured one square rod in each, which the Committee considered to be a fair average of the whole. They measured from the centre between two rows, and gathered, shelled, and weighed each rod separately: the first rod weighed 44 1-4 lbs., the second 46 1-4 lbs., making the average 45 1-4 lbs. to the rod; reckoning 56 lbs. to the bushel, as per rule of the Society, and it gives me 129 16-56 bushels to the acre. The corn was well ripened, and I commenced on the same day to harvest it.

DEBT AND CREDIT ON THE ABOVE FIELD.

Land valued by the Assessors at $225 per acre, interest on ditto,	$27.00
Taxes on the same this year,	2.56
Ploughing in September, 1852,	5.00
Carting sods into barn cellar for hogs at sundry times,	10.00
Manure of horse and cow, 5 1-2 months,	8.00
Use of hogs to work over sods and composting,	10.00
Applying manure, $10; ploughing, harrowing, and furrowing, $6,	16 00
Seed corn and planting, $3.50; cultivating and hoeing, $6,	9.50
Cutting stalks and harvesting,	16.00
	$104.06

VALUE OF CROP.

Stalks and husks,	$30.00
258 4-7 bushels shelled corn, at 90 cents,	232.20
Increased value of land, benefited by manure,	14.00
	$276.20
Deduct cost as above,	104.06
	$172.14

Yours, very respectfully,

LUTHER GILBERT.

Grantville, Needham, Nov. 11, 1853.

STATEMENT OF J. R. DOW, OF MILTON, ON CORN.

To J. P. Jones, Esq., Chairman Committee on Grain Crops:

DEAR SIR — The one and five-eighths acres of land which I offer for premium, were broken up and planted to corn in 1852, and then manured with five cords of piggery manure to the acre. In 1853, the same land was treated in precisely the same way. I finished planting 8th of June, as follows: —

25 rows were planted 18 inches apart both ways.
50 " " 24 " " " "
50 " " 30 " " " "

And the result was as follows: —

336 baskets of sound merchantable corn.
20 " " very good pig corn.

356 baskets.

Equal to 109 bushels shelled corn to the acre. 20 baskets were shelled and weighed, which yielded 10 bushels, or 5 bags, each weighing 111 3-4 lbs. to the bag. The corn planted 24 inches apart, yielded the best. After having tried the experiment of close planting, I have come to the conclusion to plant in future 24 inches apart, feeling satisfied I have the best crop and the largest yield, when my land is manured as above. The land is a moist, loamy soil, originally very rocky.

ESTIMATED COST AND EXPENSES.

Piggery manure,	$48.75
Ploughing and harrowing, and spreading manure,	15.00
Furrowing and planting,	8.00
Cultivating and hoeing,	6.00
Cutting stalks and harvesting,	14.00
Taxes,	.90
Interest on the value of the land, at $150 per acre, at 6 per cent., is	10.71
	$103.36

VALUE OF THE CROP.

356 baskets, or 178 bushels, at $1 per bushel,	$178.00
Stalks and husks,	35.00
Whole crop,	$213.00
Deduct cost and expenses,	103.36
Profit,	$109.64

Or at the rate of $67.45 per acre.

Annexed is a certificate of the land as surveyed by Charles Breck, Esq., Surveyor.

JOHN R. DOW.

Milton, Nov. 10. 1853.

Milton, November 3, 1853.

This certifies that I have measured the piece of land on which the corn of Mr. J. R. Dow grew, and found it to contain 1 acre, 2 roods, 20 rods.

CHARLES BRECK, *Surveyor.*

STATEMENT OF P. RUGGLES, OF MILTON, ON CORN.

(See Report of Special Committee.)

The land on which the corn was raised was planted in 1852, one-third with corn and two-thirds with potatoes, and was manured about the same as the present year. The soil is a good loam, and has been cultivated many years. This spring it was ploughed with a horse, after spreading about three-fifths of the manure, the other two-fifths being put in the drills on which the corn was planted, one kernel in a place on each side of the drill, in a zig-zag form, about six inches apart. The drills were from two and a half to three feet apart. The suckers, of which there were a great many, were cut soon after the corn was silked out, in order to let in the sun, the drills running nearly north and south. I supposed in the spring that I had planted one acre, but, by actual measurement, there was but 133 rods. The produce was 147 baskets of ears, yielding, by estimated measure, 97 bushels and 19 quarts, or about 118 bushels per acre. The corn was planted about the 15th of May, and was of the kind called Plymouth County, or smutty white. One-third of the field was moist land, and yielded much better than the other part.

ESTIMATED COST OF SAID CROP.

5 cords of barnyard manure, at $6 per cord,	$30.00
Carting out and spreading,	3.00
Ploughing the ground twice with horse,	3.50
Two days' planting,	3.00
Ploughing and hoeing twice, four days,	6.00
Cutting suckers, two days,	3.00
" stalks, " "	3.00
" up butt stalks,	2.50
Husking corn, 4 days,	5.00
Interest on land, at $200 per acre,	10.50

Taxes, about	$1.00
Value of seed,	.75
	$71.25

VALUE OF THE CROP.

97 bushels and 19 quarts of corn, at $1 per bushel,	$97.59
Suckers and top stalks, 2 tons,	20.00
Butts and husks, 2 tons,	10.00
	$127.59
Deduct expense,	71.25
Net profit on 133 rods,	$56.34

PHILEMON RUGGLES.

Milton, Nov. 10, 1853.

Milton, October 27, 1853.

This certifies that I measured the land on which the corn of Mr. P. Ruggles grew, and found that it contained 133 rods.

CHARLES BRECK, *Surveyor.*

REPORT OF SPECIAL COMMITTEE ON MR. RUGGLES'S CROP OF CORN.

The Committee appointed at a meeting of the Trustees of the Norfolk Agricultural Society, on the 17th of November last, report, That, in pursuance of that appointment, they have visited the farm cultivated by Mr. Philemon Ruggles, in Milton, for the purpose of ascertaining the accuracy of the statement made by him respecting his crop of corn.

The field measures 133 rods, from which 147 baskets of corn, on the ear, were gathered, measuring, when shelled, 20 1-10 quarts per basket, and weighing 37 lbs., making 5,439 lbs., which divided by 56 lbs., the Society's standard for the bushel, gives 97 bushels, equal to 117 bushels to the acre.

As a part of this corn had already been removed, the Committee could not strictly verify Mr. Ruggles's account of the number of baskets brought from the field. They have, however, no reason to doubt its accuracy; and it is substantially corroborated by Mr. Breck's admeasurement of the bin, soon after the corn was placed there.

Respectfully submitted.

THOS. MOTLEY,
CHEEVER NEWHALL.

December 8, 1853.

Milton, November 12, 1853.

J. P. Jones, Esq., Chairman of the Committee on Grain Crops:

SIR — Inclosed you will receive the statement of B. F. Dudley, on Rye, and those of J. R. Dow and P. Ruggles, on Corn, and as you requested me, being in the neighborhood, to examine them, and communicate what information I could obtain respecting them, I submit the following: — The land on which Mr. Dudley's rye was raised, as he states, was called worn-out plain, and fifty dollars per acre would have been called a high price for it for cultivation. It has been mostly used for pasture for many years, although sometimes cultivated, but never, to my knowledge, with much success, until the present year. As you will perceive by his statement, it was not a selected part of his field that was taken to estimate from, but the whole taken together; and, as I often examined the field, I think it would have been difficult to have selected one acre better than the rest, as it was very even, and all good. After the grain was harvested, and the quantity reported, I measured the ground, and found it to contain 2 acres, 3 roods, 7 rods, as given in his statement, which, as I reckoned it, is at the rate of 47 1-2 bushels per acre. The rye, after reaping, was stooked in the field for some time, and then carted near to the barn and stacked out for some weeks, then taken into the barn and threshed, and must have lost several bushels in moving, which would have been saved, had it been carried directly from the field into the barn, and have made the crop near or quite 50 bushels per acre, making a clear gain of about $48 per acre — a sum

sufficient to have bought the land a few years ago, and which, in many parts of the County, would now buy land equally as good, and in some much better.

Mr. Ruggles supposed, at the time of planting in the spring, that he had an acre of land, and entered it for a premium accordingly. Subsequent measure, however, proved that there was but 133 rods. I visited the field several times, and, as the land was strong and well manured, the corn grew rapidly and threw up a large quantity of suckers, which, as he states, were cut to let in the sun, of which there was some need, as the field was a perfect swamp. The practice of cutting the suckers is objected to by some cultivators, as injurious to the crop. In this case the suckers and top stalks were both cut, whether to its injury or benefit is not known; one thing, however, is certain, there was an extraordinary large crop. The field by measurement contained 133 rods, from which there were harvested 147 baskets of corn on the ear. On the 27th of October, I went to Mr. Ruggles's place, and helped him shell two baskets of ears of the corn, and found it to yield 42 1-2 quarts of shelled corn, or 97 19-32 bushels on the 133 rods. As there has been dispute about so large a crop of corn being raised in our County, I have been very particular about the measure, although I had no doubt of Mr. Ruggles's honesty in the statement, yet, to satisfy myself as well as the public, I measured the corn, which was put up in a regular bin, and found that there were 226 cubic feet of ears, which — according to my figuring, and allowing 2747.70 cubic inches to the heaped bushel, which, I believe, is the standard, being 597.28 inches more than a level bushel — would give 142 baskets of ears; and, as it would pack much closer in a large bin than in baskets, I think there could have been no mistake about the measure or quantity. I should have stated that the cobs from the two baskets of ears weighed but 15 1-2 lbs. The great superiority of this kind of corn consists in the extra quantity which a basket of ears will yield, being in this case 21 1-4 quarts; and, should it prove to contain as much nutriment as the yellow kind, it will be a valuable acquisition to the farmer.

The corn field of Mr. Dow I also examined and surveyed, as my certificate will show. It was indeed an uncommon field to look at; and the result proved that it was equal to the promise. The soil was naturally rather moist, and originally very rocky, and many rocks are now in the land, large enough to occupy the space of several

hills each, although no deduction was made on account of them in the measure of the land. This field also was surveyed after the corn was harvested, and the result reported to me; the produce of the whole field is also given, instead of taking one rod and measuring that, as has sometimes been done, giving an opportunity to say, that the best rod of the field was selected for trial. This field, as you will perceive, produced more baskets of ears to the acre than Mr. Ruggles's field; and had it yielded as much to the basket as that, would have produced over 30 bushels more to the acre; and, as there appears no reason why an ear of corn with a small cob may not be raised as easily as one with a large one, if the corn should prove as valuable, the difference in the yield would pay nearly the cost of cultivation — an object certainly worth the consideration of farmers.

Respectfully yours,

CHAS. BRECK.

THOS. MOTLEY, JR.'S, CROP. — (*Not for competition.*)

The following statement by Thos. Motley, Jr., Esq., of West Roxbury, shows that another *remarkable* crop of corn has been raised this year in Norfolk County: —

Quantity of Corn produced from 3 615-1000 *acres land in West Roxbury, year* 1853.

514 baskets, by average of 20 baskets shelled and measured, gives, by sealed measure, of good mealing corn, - - - - - -	85 bshls.	
Pig corn, - - - - - - - -	10 "	
	95 "	per acre.
514 baskets, by weight 56 lbs. to bushel, good mealing corn, - - - - - -	95 bshls.	
Pig corn, - - - - - - - -	13 "	
	108 "	per acre.

The land was surveyed, November 28, 1853, by W. A. Garbett, Land Surveyor.

THOS. MOTLEY, JR.

STATEMENT OF ISAAC H. MESERVE, ON CORN.

Brook Farm, Nov. 12, 1853.

To the Committee on Grain Crops:

GENTLEMEN — The acre of corn which I offer for a premium, was raised on light, loamy soil; it was pasture land in 1852; I ploughed it, the last of September of that year, eight inches deep; last spring I spread about six cords of green barn manure, night soil, and meadow mud, well mixed: then ploughed from ten to twelve inches deep, harrowed it, then ploughed four inches deep, harrowed again, and planted with one shovelful of compost of hogs' manure and meadow mud in each hill; the rows three feet apart and the hills two and a half; the corn was the twelve-rowed kind, with four kernels in a hill. I planted the 17th of May; cut the stalks the 8th of September; and harvested the 19th of October. I cultivated once and hoed three times; after the first hoeing, I put around the corn 250 lbs. of guano.

EXPENSES.

Ten cords manure, at $4,	$40.00
Ploughing and harrowing,	8.00
Furrowing and planting,	5.00
Hoeing, &c.,	5.00
Cutting stalks, and harvesting,	7.00
Interest on land,	6.00
Guano,	7.50
	$78.50

VALUE OF CROP.

Stalks,	$15.00
One hundred and five bushels corn,	105.00
One half the manure unexpended,	23.75
	$143.75
Deducting cost of crop,	78.50
Leaves net profit of	$65.25

The ground was measured by James Ritchie, Esq.; the corn was measured by Mr. James M. Wentworth; there were one hundred

and five baskets; one basket he shelled, and it measured thirty-two quarts. The most of the work was done by the inmates belonging to the institution; but I have charged for their labor what I think it would cost.

Most respectfully submitted,

ISAAC H. MESERVE,

Superintendent Roxbury Almshouse.

Brook Farm, Nov. 12, 1853.

I hereby certify that, on the 19th of October past, I harvested and measured one acre of corn, raised on Brook Farm this year: it produced one hundred and five baskets; I shelled one basket, and it measured thirty-two quarts, making one hundred and five bushels of shelled corn.

JAMES M. WENTWORTH.

I hereby certify that I have, this day, measured one acre of land, on which corn was this season raised, for I. H. Meserve, Esq., at Brook Farm.

JAMES RITCHIE, *Surveyor.*

West Roxbury, October 19, 1853.

STATEMENT OF BENJ. N. SAWIN, OF DOVER, ON CORN.

GENTLEMEN — The two acres of corn entered by me for premium was raised on land of a sandy loam, and has been improved as a pasture the last eighteen years without any cultivation. In May, 1852, the land was ploughed six inches deep, and harrowed, and planted with corn. I put upon the two acres nine cords of unfermented manure from my barn cellar. In applying the manure, (for an experiment,) on one acre I spread four and a half cords and harrowed it in, put none in the hill; on the next acre I applied the same quantity and quality of manure in the hill, and spread none. In May, 1853, I ploughed the ground eight inches deep. On one acre, (the same that was spread on last year,) I spread and ploughed in four and a half cords of unfermented manure, put none in the hill,

furrowed with a horse-plough, making the hills two feet ten inches apart each way; on the next acre I applied the same quantity and quality of manure in hill, and spread none. The corn was planted the 20th and 21st days of May, putting four or five kernels in the hill — a cultivator was used between the rows — and hoed twice; harvested the 20th of October. Two rods (one on each acre) were selected, which were considered a fair sample of the field. On the acre on which the manure was spread, the rod yielded 19 quarts shelled corn, which weighed 35 lbs., and allowing 56 lbs. to the bushel, makes 100 bushels per acre. On the acre on which the manure was put in the hill, the rod yielded 17 quarts of shelled corn, which weighed 31 1-4 lbs., which makes 89 2-7 bushels per acre. The expense of the crop was as follows, viz.: —

Interest on value of land, at $15 per acre,	$5.40
Taxes,	.54
9 cords of manure, at $5 per cord,	45.00
Ploughing twice,	5.50
Furrowing,	1.50
Carting and applying manure,	4.50
Planting,	4.25
15 quarts seed,	.47
Crow line around the field,	.16
Cultivating and hoeing twice,	6.25
Cutting and binding stalks,	2.55
Harvesting corn,	10.00
Total,	$86.12

The value of the crop is as follows, viz.: —

Stalks,	$6.96
Husks,	13.00
One-half of manure unspent,	22.50
189 2-7 bushels of corn, at $1,	189.28
	$231.74
Deducting cost of crop,	86.12
Leaves net profit of	$145.62

Yours respectfully,

Dover, Nov. 9, 1853. BENJ. N. SAWIN.

STATEMENT OF R. MANSFIELD, ON CORN.

The field planted with corn measures four acres and sixty-eight rods; the soil is free and easy to work, without a single stone upon it; it has been used as a field for growing redtop seed for a number of years previous to 1850; since that it has been pastured by milch cows, till the present year; no manure had been put upon it; the cows had been yarded off the land at night, thus reducing the land by continued cropping. Last spring the land was ploughed with *Keith's Plough, No.* 1, *cutting a furrow about ten inches in width*, not over seven in depth; the team was two horses; it was harrowed lightly with one horse, then furrowed both ways, so as to make about three thousand hills to the acre. The manure used was a mixture of mud with the barn and pigsty manure; through the year remaining in the yards till it was put directly in the hill. The corn was an eight-rowed variety of yellow, and had been raised for more than forty years in this vicinity. The seed was prepared by a method which I have practised nearly forty years, which prevented the ravages of worms,* so that the hills were full of stalks, with but a very few exceptions. The manure being all put in the hills, the planting was immediately done, so there was no loss by the sun and winds, as often happens; commenced planting corn the 18th May—owing to stormy weather, it was delayed till June 1st; commenced ploughing and hoeing 10th June—we ploughed and hoed the field over three times between this and 12th July. The stalks were cut the second week in September; cut, bound, and piked up the same day; in about twelve days they were taken to the barn. On the 7th of October commenced harvesting. The result is as follows:—

CREDIT.—By 600 bundles stalks, - - -	$12.00	
" 8,550 lbs. husks, - - - -	32.06	
" 190 bushels corn, - - -	190.00	
		$234.06
Less by cost, as follows, - - -		168.80
Profit, - - - - - - -		$65.26

* A RECEIPT FOR PREPARING SEED CORN.

Dissolve four table-spoonfuls of tar in one gallon of boiling water, and stir in immediately six quarts of corn; in two minutes drain off the water; then mix one pint of plaster of Paris, which will separate the kernels for dropping.

R. MANSFIELD.

DEBIT.—Interest on land,		$15.00
Taxes,		1.20
Ploughing 2 1-2 days with 2 horses,		10.00
Harrowing and furrowing,		5.00
Seed corn, 33 quarts,		2.00
72 loads manure, 25 bushels each,		72.00
Planting,		21.60
Ploughing and hoeing 1st time,		7.50
" " " 2d "		6.00
" " " 3d "		4.50
Cutting and curing stalks,		5.00
Harvesting,		19.00
		$168.80

The corn cost 65 cents and 6 mills per bushel. Now should we subtract one half the expense of manure, as is the practice of those who contend for premiums, it would have cost but 46 cents and 7 mills per bushel. My object in this experiment is to prove that the largest crops are not always the most profitable.

ROBERT MANSFIELD.

West Needham, November, 1853.

STATEMENT OF B. F. DUDLEY, ON RYE.

The land on which this rye was raised was used as pasture until the fall of 1851, when it was ploughed with a Michigan plough. The following spring it was planted with corn, potatoes, and barley. These crops were manured in the hill, with about four cords to the acre; the barley was manured at the same rate, spread broadcast.

These crops were taken off, and on the 7th of October, 1852, the rye was sown.

The land from which this crop was taken contains a fraction short of three acres.

EXPENSE OF THE CROP.

Ploughing,	$10.00
6 cords pig manure and carting,	36.00
20 bushels leached ashes and old plaster,	2.00
3 3-4 bushels rye, and sowing,	4.50

Harrowing, bushing, and rolling, - -	$2.00
Reaping, binding, and stooking, - - -	15.00
Moving and stacking, - - - -	6.00
Threshing and winnowing, - - - -	16.59
	$92.09

VALUE OF THE CROP.

132 3-4 bushels rye, at 90 cents, - -	$119.52½
7 tons, 300 lbs. straw, at 75 cents per cwt.,	107.25
	$226.77½
Deduct cost, - - - - - -	92.09
	$134.68½

The above crop is at the rate of 47 1-2 bushels to the acre; and the land on which it was raised has always been called worn-out plain, and considered worth about $50 per acre.

Respectfully yours,

B. F. Dudley.

Milton, Sept. 26, 1853.

STATEMENT OF HORATIO MASON, OF EAST MEDWAY, ON WHEAT.

To the Committee on Grain Crops, of the Norfolk County Agricultural Society:

Gentlemen — The field of Wheat entered by me for premium contains 1 acre and 40 rods; the soil gravel, and subject to drought; it has formerly been ploughed lightly. Last year I ploughed it full two inches deeper, (about eight inches,) and spread the dry parts with clay, at the rate of 20 loads per acre; planted with corn; manured in the hill with 12 loads compost — one-third mud, one-third clay, the remainder barnyard manure — and received a good crop. After the corn was removed, I again spread the dry parts with clay. In April of this year, I ploughed in the clay, and spread the whole field with 12 loads green manure, and ploughed it in; then sowed it

with spring wheat, and harrowed in; the produce was 1380 lbs. I have not, in the account, charged for the clay. I consider that a large share of it remains for the benefit of future crops.

I charge for the

2 ploughings, - - - - - - - -	$3.00
Sowing and harrowing, - - - - -	1.50
One-half 12 loads manure, - - - - -	6.00
Reaping, binding, say $4; threshing $4, -	8.00
2 bushels seed, at $1.50, - - - - -	3.00
Interest on land, worth say $50 per acre; taxes,	4.20
	$25.70
Credit.—By 23 bushels Wheat, at $1.50, - -	34.50

HORATIO MASON.

East Medway, November, 1853.

STATEMENT OF BENJ. N. SAWIN, OF DOVER, ON BEANS.

GENTLEMEN—The half acre of White Beans which I offer for premium was raised on soil of a light, sandy loam, which has been improved as a pasture for nineteen years, without any cultivation. In November, 1852, it was ploughed for the purpose of killing out the bushes, (consisting of white birch, sage willow, &c.); the 1st of June last it was harrowed with a cultivator harrow across the furrows, and furrowed with a plough, one way, three feet apart; I then applied one and a half cords of unfermented manure, taken from the barn cellar, put half of a shovelful in the hill, eighteen inches apart in the row. The beans were planted the 10th of June; put from twelve to fifteen beans in a hill; they were hoed but once. They were harvested the 1st of October, and, when threshed, measured 8 bushels and four quarts. They weighed 70 lbs. to the bushel. They were of the variety called the pea bean.

EXPENSE OF THE CROP.

Interest on value of land, at $30 per acre, -	$0.90
Taxes, - - - - - - - - -	.09
June 6.—Harrowing, - - - - - - - - -	.64

June 9.—Furrowing and applying manure, - -	$1.20
" 10.—Planting, - - - - - - - -	1.12
" " One and a half cords of manure, at $4.50, -	6.75
" " 12 1-2 quarts seed, - - - - - -	.75
July 25 & 26.—Cultivating and hoeing, - - -	1.00
Oct. 4.—Harvesting, - - - - - - - -	1.25
Total, - - - - - - - -	$13.70

VALUE OF THE CROP.

8 1-8 bushels beans, at $2 per bushel, - - - -	$16.25
450 lbs. stover, at 30 cents per hundred, - -	1.35
One half of manure unspent, - - - - -	3.37½
	$20.97½
Deduct cost of crop, - - - - -	13.70
Leaves net profit of - - - - -	$7.27½

Yours respectfully,

BENJ. N. SAWIN.

Dover, Nov. 9, 1853.

STATEMENT OF HORATIO MASON, OF EAST MEDWAY, ON BARLEY.

To the Committee on Grain Crops, of the Norfolk Agricultural Society:

The field of Barley contains one acre. It embraces a variety of soil, from a rich gravel loam on one side, to meadow mud on the other. It was planted with corn last year. This spring the ground was ploughed, and spread with thirteen loads of green manure, and ploughed in, and sowed with two bushels of four-rowed barley. The part of the field next to the upland is well adapted to this crop, and produced as fine a crop as I have ever seen, while the flat land next to the meadow was very light.

EXPENSE OF CULTIVATING.

Twice ploughing, $2.50; cultivating and sowing, $1, -	$3.50
Threshing and harvesting, - - - - - -	6.00

One-half the manure, $6.50; interest on land, at $70.42 per acre,	$10.70
Two bushels seed, $2; taxes, say, 30 cents,	2.30
Cr. — By 40 bushels Barley, at 90 cents,	$36.00

H. MA :

East Medway, November, 1853.

MR. NEWHALL'S CROP OF RUTA-BAGA TURNIPS.

Hon. Marshall P. Wilder, President of N. A. Society:

DEAR SIR — I herewith transmit a letter recently received from Cheever Newhall, Esq., of Dorchester, and ask for it a place in the forthcoming number of the Society's Transactions.

One of the chief objects of this publication is, I presume, to record, for general information and encouragement, instances of successful cultivation by members of this Society, and others in our own County.

We have here an account of a remarkably profitable cultivation of a few acres of old and poor pasture ground, the knowledge of which may be highly useful and encouraging. Certainly it shows that the farmers of Norfolk County have no reasonable cause for complaint, while, by timely and judicious labor, they may secure a harvest equal in value to many that are gathered from the fertile soils of Ohio or Illinois.

Yours respectfully,

C. C. SEWALL.

Dorchester, Dec. 12, 1853.

Rev. Chas. C. Sewall:

DEAR SIR — In conversation with you, a few days since, relative to a crop of Ruta-baga raised by me, on five acres of land, the present season, I stated the result; since which I have received a note from you, soliciting a detailed account of the manner of planting and cultivating them.

The land on which they grew was poor pasture land, and had not been cultivated for more than thirty years. It was ploughed last fall, and again this spring; was well manured, partly with night soil and partly with piggery manure, to which was added a quantity of guano and ground bones, — the cost of the two latter being $6.60 per acre. The potatoes grew well, and yielded a fair crop; were dug early, and sent to market. In digging the potatoes, *the tops* were laid regularly between the rows; at the same time care was taken to haul the earth over them, which made somewhat of a ridge. These ridges were three feet apart. The ruta-baga seed were dropped upon them, nine inches apart, at several times between July 27th and August 10th. No plough was used after taking off the crop of potatoes. At least one-tenth of the spaces intended for the ruta-baga were vacant, as the seed did not vegetate. About ten days after the plants were up, the cultivator was passed between the rows; the plants were thinned out, leaving but one in a space, and thoroughly weeded. This is all the cultivation they received. About the 20th of October, the entire crop on the five acres was sold for *one hundred and fifty dollars* — the purchaser to take them from the ground, where they then were.

The person who bought them says that the produce was more than twelve hundred bushels, and that they were well worth the sum he paid for them. When it is considered that this crop was raised upon land that had produced a fair yield of potatoes, and that *thirty dollars per acre* was realized for a *second crop*, while the expense did not exceed five dollars per acre, I am led to believe that land will sometimes, at least, pay the cultivator a fair compensation for the labor bestowed.

With much esteem,

Your obedient servant,

CHEEVER NEWHALL.

PRESENTATION OF THE WORLD'S PRIZE PLOUGH.

To the Norfolk Agricultural Society:

Prouty & Mears present the American Prize Plough at the World's Fair, London, 1851, obtained under the following circumstances, viz.: — A trial was had in which the European ploughs only were present; the result was in favor of the English ploughs. Some time after another trial took place, between the American and those successful English ploughs, at which time the Prize Medal was awarded to the above plough.

Let it be kept as a memorial of the fact! — as an incentive to industry and perseverance — giving our young men to understand, that though Elisha had good reason for quitting ploughing for prophesying — not being able to break up with less than twelve yokes of oxen, — yet, as it can now be better done with one yoke, they ought not to "put hand to the plough and look back," "neither should they neglect husbandry which the Most High hath ordained."

Respectfully yours,

JOHN MEARS,
LORENZO PROUTY,
JOHN MEARS, JR.

Plough Factory, Sept. 27, 1853.

REPLY OF THE PRESIDENT.

Norfolk Agricultural Society, October 1, 1853.

To Messrs. John Mears, Lorenzo Prouty, and John Mears, Jr.:

GENTLEMEN — Your communication of September 27 is received, placing at the disposal of the Norfolk Agricultural Society, a *fac simile* of your renowned Plough, which distanced all competition at the World's Fair, in London, in 1851, and received the FIRST PREMIUM of that Association.

I have the honor herewith to tender you the most cordial thanks of the body which I represent, for this valuable present. We have stationed this noble implement in a conspicuous position in our new Agricultural Hall, where it will remain as a memorial of the enterprise, success, and genius of its worthy donors, whom we are happy to recognize as members of our Society.

We feel ourselves to be participants in the renown which you have won, not only for yourselves and your associates, but also for your county, your commonwealth, and for your country.

In reciprocating the kind sentiments expressed in your note, permit me to add my earnest hope that, whatever honor may attach to this plough, or to its inventors, the day may soon arrive which shall witness the fulfilment of the cherished prediction — "*when the ploughman shall overtake the reaper.*"

With sentiments of the highest respect,

Your obedient servant,

MARSHALL P. WILDER, *President.*

Boston Plough Factory, Dec. 20, 1853.

To Hon. Marshall P. Wilder, President of N. A. Society:

Dear Sir — Your note and official communication is received; its kind and honorable sentiment we would appreciate and reciprocate.

The question has arisen, and may again arise, Why was the *fac simile* and not the identical Plough presented? — to which we reply: That Plough has not returned. It went into the hands of an eminent Belgian agriculturist, and by him was transmitted to the Continent, to "turn the world upside down there also."

With sentiments of high regard,

Yours truly,

JOHN MEARS,

In behalf of my associates.

ON POULTRY.

BY DR. EBEN WIGHT, OF DEDHAM.

Since public attention in this country has been specially drawn to the subject of poultry, citizens of the County of Norfolk have taken a conspicuous lead in the introduction and propagation of the most esteemed kinds. This was particularly evinced at the far-famed exhibitions of poultry held within a few years at the New England Metropolis, where a large proportion of the best specimens in the different classes, hailed directly from this territory. The new interest in this branch of husbandry has been chiefly manifested in reference to varieties of the bird to which the term *fowl* is commonly applied. One variety of this bird, of oriental origin, has in fact been regarded with a degree of enthusiasm not inaptly characterized as "*the Shanghae fever*," most of the importations of the stock having been derived from the city of Shanghae, in China. Individuals desirous of turning this excitement to their pecuniary advantage, have endeavored to make certain accidental or trifling differences in this variety, the basis for its division into distinct *breeds*. Hence we hear of Cochin-China, Imperial Chinese, Hong Kong, Hoang Ho, Brahma Pootra, &c., all derived from importations from Shanghae.

As showing the groundlessness of these attempted distinctions, attention is invited to some extracts from a work just issued in England, entitled "The Poultry Book: comprising the Characteristics, Management, Breeding, and Medical Treatment of Poultry; being the results of personal observation and practice of the best breeders, including Captain W. W. Hornby, R. N.; Edward Bond, Esq.; Thomas Sturgeon, Esq.; and Charles Punchard, Esq. By Rev. W. Wingfield, Honorary Secretary of the Cornwall Poultry Society, and G. W. Johnson, Esq., Honorary Secretary of the Winchester Society for the Improvement of Poultry."

The work commences with a chapter headed "History and Description of the Shanghae Fowl," as follows:

"There is a doubt which had better be removed from the very threshold, usually conveyed in the question — 'Are Cochin-China and Shanghae fowls the same?' We have always entertained the opinion that they are; and as we have invariably found that fowls imported from China into this country, whether feathered-legged or plain-legged, whether dark-plumaged or light-plumaged, came hither, directly or indirectly, either from Shanghae or its vicinity, we have long since concluded that 'Cochin-China' is a name altogether misapplied to this variety. This conclusion amounts to conviction since we have received a letter from Mr. Robert Fortune, who has passed so many years in various parts of China, in which he says — 'The man who first gave these fowls the name of Cochin-China has much to answer for. I firmly believe that what are called Cochin-Chinas and Shanghaes, are one and the same. One thing is certain, — the breed you have in this country as Cochin-China, are plentiful about Shanghae. They were discovered there after the war, and were frequently brought to this country, and taken to India by captains of trading vessels. Was not this the date of their introduction to England? And what grounds has any one for supposing the fowls ever saw Cochin-China? We thought that this variety might have been earlier known, owing to our long-established commerce with Macao and Canton, but Mr. Fortune says that this breed is but little known in those warmer parts of China, and that in fact, the southern Chinese were as much struck with the size of the breed as we were.' He adds, 'The Shanghae breed seems to be more common about Shanghae, than anywhere else in the north, but I have found it over all the low country of that part of China. The southern breeds have been long well known to ship captains and English residents; but there is nothing very marked in their character.'

"We have already stated that we do not believe there are any grounds for the belief that this variety ever saw Cochin-China; and we think, with Mr. Fortune, (for his question is indicative as well as inquisitive) that they were introduced into this country soon after the more northern parts of 'the Celestial Empire,' such as Shanghae, were thrown open to our traders, at the conclusion of the Chinese war, in 1843. At the Poultry Show held at the Zoölogical Gardens, in the May of 1845, there were prizes especially devoted to 'Malays and other Asiatic breeds;' but these brought to the

exhibition no other oriental variety than the Malays. In fact we never met with any published notice of the Shanghae fowls until 1846, and we shall be near the truth if we assign 1845 as the year they were first imported. It was in that year that Her Majesty received specimens of them which she exhibited at the Show of the Royal Dublin Agricultural Society, in the April of 1846."

The conclusion respecting the date of the introduction of the Queen's fowls, as expressed in the above paragraph, is erroneous. In the autumn of 1843, the London *Times* noticed them as being then "in Her Majesty's aviary at Windsor." It was stated that there were "seven Cochin-China fowls, five hens and two cocks, imported direct from Asia." That they came from "Asia" there is no doubt, but the propriety of calling them "Cochin-China fowls" does not appear. The *Times* goes on to describe the fowls, and makes a strange blunder by confounding them with the Fire-backed Pheasant of China.* The importation alluded to is worthy of note, as constituting the original leaven which has since leavened the whole lump of admirers of that kind of fowl in England and America.

Many readers will recollect that one of the distinctions which in this country has been claimed between the so-called Cochin-China and Shanghae fowls, was that the former were destitute of feathers on the legs, while the latter were said to be feathered to the toes. But every one who has seen many fowls imported from Shanghae, knows that there can be no foundation for this claim, as both feathered and unfeathered legs are often found in the fowls obtained at that place. The name of Cochin-China has, however, been given to fowls in some instances without even the pretence of this distinction to justify it. One of the first importations of the Shanghaes to this country, — that of Dr. Baylies, of Taunton, — were called Cochin-Chinas by a notorious person who subsequently obtained the stock, although he was expressly told by Dr. Baylies that the fowls came from Shanghae!

We recur again to the work before us:

"Having thus traced out the date of the introduction and the place whence derived, let us next inquire something of the char-

---

* See Albany Cultivator for 1844, p. 43.

acteristics and treatment of the birds as they occur at Shanghae itself; and here Mr. Fortune again comes to our aid. In the letter already quoted, he says — 'The Shanghae breed occurs both with feathered and unfeathered legs, but more frequently unfeathered. The most admired kinds there are the game [*i. e.*, partridge or pheasant] colored ones. Many of them are [colored] much like the pheasant of the country. However, I am safe in saying that the Chinese do not attach so much importance as we do to purity of color; large size and large eggs are what they most admire and prize.'

"It being certain that the true Shanghae fowl is met within its native district with plain legs, even more frequently than with legs feathered, or *booted*, as it is technically termed, the point often disputed is now settled, as to whether this is any demonstration of a distinct breed. Henceforth it must be held to be a mere matter of taste.

"Mr. Fortune's testimony settles another disputed point. It is very evident that, except as a matter of taste, the light colored should have no preëminence over the darker plumaged; and those societies have acted judiciously who have given separate prizes of equal value to all the sub-varieties of color. It is judicious, because it is needlessly placing a judge in a very perplexing position to call upon him to decide upon specimens of equal merit in all important points, but differing in color."

The work then speaks of the black, white, gray (or so-called "Brahma Pootra,") buff, cinnamon, and partridge or grouse-colored Shanghaes as sub-varieties of one breed. In regard to the "Brahma Pootras," specimens of which, introduced from this country, are known to the authors, — their "history" is summed up by an expression of the opinion "that it will not prove a distinct breed, but either a variety of the Shanghae family, or the result of a cross between those birds and the Malay." This is just what they are *known* to be in this country. Some of them came from Shanghae, and some are a cross of these and the "Chittagong," a term which, as used by English authors on poultry, is only a synonym of Malay. Hence they were at first, and still are in many places, merely called "Chittagongs."

In reference to names of fowls, there is another matter which it is well to notice in this connection. In the United States, the term Hamburgh is often applied to fowls with crests or top-knots.

Late English writers do not so use the term. According to the classification adopted by the work above noticed, and which prevails with the British poultry societies, all top-knots are placed under the head of Poland fowls, and are sub-divided according to coloring and certain minor distinctions — as White Polands; Black Polands with white tops; Silver Polands (those having a silvery-white ground color;) Golden Polands (having a yellow ground color,) with other classes for such as have beards and muffs.

Hamburg fowls, on the other hand, have no top-knots. Under this head are placed what in this country are called Bolton Grays, Creoles, &c. The Hamburgs are divided into Silver-spangled Hamburgs and Gold-spangled Hamburgs, and these two classes are again sub-divided into Silver-pencilled Hamburgs, Golden-pencilled Hamburgs, &c. To avoid confusion, it is proper that our amateurs should conform to this classification.

The foregoing remarks in reference to the misnomers of fowls, it is hoped, may tend to correct the misunderstanding which has prevailed on the subject in this vicinity. Other matters in reference to poultry have lately been so thoroughly discussed through the medium of periodicals, poultry books, &c., as to require no further notice at this time.

REPORT ON ESSAYS.

The following Essay is the only one which has been received this year.

The Committee have examined this paper with much pleasure. It is a sensible, well written production — practical in character, useful in its tendency, and is evidently from the pen of one accustomed to present his views in a clear and perspicuous manner. This Essay furnishes information and suggestions valuable to farmers, wherever located, and affords gratifying evidence that we have, among that worthy class of our fellow-citizens whose peculiar profession is to *cultivate the soul rather than the soil*, those who are qualified to discuss the most difficult topics, and give direction and encouragement to thinking men, and especially to those belonging to the great interest of Agriculture.

The Committee consider this Essay as one of the best which has been presented to the Society, and award to the author a premium of Ten Dollars.

MARSHALL P. WILDER, *Chairman.*

ON THE POTATO.

BY REV. JOHN M. MERRICK, OF WALPOLE, MASS.

In the following remarks, I confine myself within a narrow range, and leave unsaid many things respecting the culture, gathering, preservation and uses of potatoes, which might perhaps have been interesting to the farmers of Norfolk County. I shall speak briefly of the history, uses, planting and diseases of the potato, — in the hope that this imperfect essay may provoke my fellow-citizens to deeper investigations, to more numerous and intelligent experiments with reference to these subjects. Diligent inquiries and accurate experiments promise the only satisfactory results. The members of this Society are earnestly requested to preserve their farm journals, that at some subsequent occasion we may compare notes, and from our united efforts increase our knowledge and learn the best methods of applying it to practice.*

1. History of the Potato.

It is remarkable that the history of a plant which has exerted so great an influence upon the civilization of the world, should be involved in so much obscurity. It is difficult, if not impossible, to ascertain the time at which, or the nations by whom, it was transported from South America to distant regions. The Spaniards found it only in Chili, — though recently it has been said to grow wild in Peru, New Granada, and Mexico. Humboldt quotes De la Vega as saying, that in the times of the Incas, maize and potatoes, and,

* I have recently received a letter from an intelligent member of our Society now in England. From diligent inquiries, in several agricultural Counties, he learns that the potato rot prevails extensively this season; and that the potatoes not diseased are very few, small and of inferior quality. Such facts here and there should furnish a motive to careful and continued experiments, if we would not abandon the cultivation of a plant so intimately connected with our agricultural prosperity.

in the warm regions, bananas, constituted the basis of the nourishment of the Indians.* Clavigero says "the potato was brought into Mexico from South America, *its native home*.† The Abbe Molina asserts that it grew wild in almost every field.‡ Sir Walter Raleigh speaks of having seen potatoes in Guiana; § but probably these were sweet potatoes, the climate of Guiana not being adapted to the Solanum Tuberosum. Darwin, in the "Voyage of a Naturalist," says, "the wild potato grows on these islands (the island of Chonos and others on the Pacific coast of South America) in great abundance, near the beach. The tubers were generally small; but I found one that was two inches in diameter. When boiled they shrunk much, and were watery and insipid, without any bitter taste." There is no question that it was found wild in Chili, nor that from Chili it was carried to Southern Europe by the Spanish colonists.

But how it reached England is not so evident. The opinion has long prevailed that it was introduced from Virginia into England by Sir Walter Raleigh, in 1586. Even so discriminating a writer as Humboldt is deceived by the authority of Sir Joseph Banks and others, and takes great pains to account for its existence in Virginia, aware that it was indigenous nowhere else in North America. It would be difficult to show that Raleigh ever was in Virginia. The colonizing expedition in which he was concerned reached Albemarle, some distance further south. There is reason to believe that the misunderstanding arose from a confusion of names. The early navigators, careless of botanical distinctions, may have applied the name of potato to the Solanum Tuberosum, and the Batatas Edulis or sweet potato, the latter alone being indigenous in the southern parts of North America. *This* was early carried to England, and cultivated. It is several times mentioned by Shakspeare and other writers.

There is some conflicting testimony on this point: for Gerard, in his "Herbal," published in 1633, says: "I have received roots hereof from Virginia, (otherwise called Norembega) which grow and prosper in my garden as in their own native country."‖ And by the drawing

---

*New Spain, Volume 2d, p. 370. †History of Mexico, p. 27.
‡Nat. History of Chili, p. 108. §Works, Volume 2d, p. 194.
‖Herbal, or Gen. Hist. of Plants, p. 927.

he distinguishes it from the sweet potato. Mattheolus, also, in his Commentary, speaks of it as having been first brought from Virginia to England; and adds that the Spaniards called it Pappas.* Something to the same purport is found in the "Universal History of Plants," published in 1651.† And a century earlier, Cicero says it was cultivated in Italy. After all, we cannot help thinking that the potato was probably brought to England from Spain or Italy. To these countries it has been introduced from the Spanish settlements in Chili, and had been cultivated there long before it was known in England. The commercial enterprise of Southern Europe, and the frequent intercourse of that part of the continent with England, would easily account for its appearance in the latter country.

The discoverers found tobacco, Indian corn and potatoes growing at the places they visited. The only one of the three which impairs the value and shortens the duration of life, became the earliest favorite; while the potato, which has since furnished food to millions, was long neglected. Nearly fifty years after its introduction the Royal Society began to notice it with a view to encourage its growth. Not that it had found its way to their tables unless as a luxury, steeped in wine or preserved in sugar, as the sweet potato was long before. Their thought was, that by adding another to the edible vegetables then in use, they might diminish the danger of famine, an evil of more frequent occurrence than now. The Royal Society considered it a desirable *last resort*, little anticipating that it would become a staple agricultural production. It is not mentioned in a review of the state of agriculture in the kingdom for 1685. Its culture was encouraged in Ireland on the ground that it furnished cheap food to poor people, was easily raised, adapted itself to the climate and was not fastidious as to soil.‡ In 1699 Evelyn said, "Plant potatoes in your poorest land," implying that they were undeserving of the best. It was not till the middle of the last century that the potato was generally known in England; and its cultivation was rather enforced by the partial failure of grain. In France also strong prejudices prevailed against its introduction as an article of food,—

---

* Mat. Comm. p. 758. † Vol. 3, p. 622.

‡ The Gardener's Kalendar for 1708 says, "The root is very near the nature of the Jerusalem artichoke, although not so good and wholesome; but it may prove good for swine."

prejudices that were overcome only by the perseverance of Parmentier, and the countenance of the king.

We must not suppose that the potato when first carried to Europe was the same thing that it now is, nor wonder that people mistook the seed-balls for the part to be eaten. There was some room for the opposition it encountered. Heriot says the roots were as large as walnuts, or a little larger; even if we suppose he meant English walnuts, the size of the potato would not be very formidable. Capt. Bowles, of the British Navy, says, that in some parts of South America, "it is a common weed in the garden, but too bitter for use." Not many years ago wild potatoes from South America were cultivated in England and bore an abundant crop, the largest of which were of the size of a pigeon's egg, and disagreeably bitter, while the vines were seven feet long. Scarcely any vegetable has been more changed by cultivation, both in size and quality. We can form some idea of the change, by recalling to mind what the long-red was forty or fifty years ago. Farmers raised it for hogs, and thought the hogs had a hard bargain, so poor and watery was it. Climate, soils, and improved methods of cultivation, have produced changes in the potato, as in many other vegetables. The rich plum of our gardens is the wild beach plum improved by culture. Celery, so mild and sweet, is produced from the coarse, rank smallage. The cherry, in its wild state, is small, hard and bitter. The potato has passed through this transforming process. From poor, watery and innutritious, it has been cultivated into a wholesome, pleasant-tasted and nourishing article of food; next to wheat, an article of the first importance to mankind. It combines the advantages of large yield, easy culture, adaptation to many varieties of soil, and a great amount of nutritive matter. From no other crop can so much food be obtained on an acre of land, with the same expense, except the tropical banana. In no other thing is the influence of climate more evident, demonstrating that though man can dwell in all climates, nothing else can. In the south of Europe potatoes are less extensively cultivated than in the north; chiefly because the climate is unfavorable to their growth, as Louisiana is less suited to their culture than Maine. Whereas in the south of Europe, Indian corn is raised abundantly, while in the north it is scarcely known. Such facts teach us the importance of commerce. It not only exchanges the productions of different countries, but it transfers fruits, and vegetables, and flowers, and

trees, to places where they are needed, and where they will flourish. The potato, originating in the mountains under the equator, has extended its range, north and south, over a space wider than that occupied by any cereal grain, and furnishes food for millions of the human race.

2. Its Uses.

The influence of different kinds of food upon the civilization of nations, is a subject that might well engage our attention. I shall only observe, that as nations advance in civilization, they require a greater variety of food, and more skill in its preparation. Savages live on a few articles, and those imperfectly cooked. Those persons who commend the superior simplicity of savage fare, and condemn the refinements of modern living, forget that savages neither live long, nor increase their numbers. Man is an omniverous animal. His teeth and stomach show that he was made to eat flesh, vegetables, and fruit; and generally we find that health and comfort are promoted by a due admixture of all. Neither the Esquimaux, who live on animal food, nor the East Indians, who live chiefly on rice, attain a high development of body or mind.

Ireland may be quoted as an illustration of the social results of living on one or a few articles of food. We may presume that, before potatoes were introduced into general use, the Irish lived, as the English did, on meat and bread; and it is certain that if the English were to abandon meat and bread, and undertake to live on potatoes, they would incur the same risk of starving that the Irish do. Even in favorable years there is a time of six or eight weeks, just before harvest, when the Irish poor endure intense privation. When a nation is reduced to one article of food, and that the cheapest, the difficulty is that, in a bad season, they have nothing to fall back upon — they are already at the bottom of the hill. Had they lived on meat and grain, they might have substituted a coarser fare; but there is no going behind the coarsest. Considering the peculiar social state of Ireland, and especially the distribution and tenure of land, the introduction of potatoes can scarcely be regarded as a blessing. True, doctors disagree. Humboldt says that, "from time immemorial, no plant has had so decided an influence on the prosperity of mankind as the potato."* But Dr. Smee observes

* New Spain, vol. 2, p. 449.

that " the potato is a plant of indolence, and politically injurious to the community, when extensively employed. In Ireland it has begotten millions of paupers." *

Still every one knows that, in ordinary circumstances, potatoes are a profitable crop, and that they contain all the materials requisite for nutrition. Let two acres of land of the same quality be cultivated, one with potatoes, the other with wheat. Suppose the potatoes to yield two hundred bushels, weighing ten thousand pounds — of this weight one quarter is solid matter. We may admit the wheat to yield twenty-five bushels, weighing fifteen hundred pounds — of this twelve hundred pounds will be solid matter. How far these two portions of solid matter will go towards supporting animal life is not so easily settled. The potato has nearly as much of nutritious starch as wheat. It has carbon, nitrogen, phosphorus, and lime, for the development and support of the lungs, muscles, blood, and bones. In gluten it is deficient, and cannot, therefore, undergo panary fermentation and form a light loaf. In this respect wheat flour stands before all other articles of vegetable food; yet wheat alone does not appear to be capable of supporting prolonged human existence in the best health. Perhaps we should be safe in asserting that, if one man was kept on bread made of pure, fine wheat flour, and another on good boiled potatoes and salt, the latter would live longer, and enjoy better health. The bread is favorable to the increase of strength, and probably, for a short time, the bread-eater could do the most work, while the other would have better health, and last longer. Indeed the best wheat bread is improved by the addition of potatoes, to the amount of one quarter of its weight — a fact well known to bakers.

Repeated experiments show that good potatoes, cooked by boiling, form a nutritive article of food; and that baked potatoes are less nourishing than boiled ones. I will mention two, out of many experiments made in Glasgow prison: — *First.* Breakfast, one-half pound oatmeal in porridge, with one-half pint of buttermilk; dinner, three pounds boiled potatoes, with salt; supper, five ounces of oatmeal and one-half pint of buttermilk. Ten prisoners were put upon this diet; they were confined for two months, employed in light

* Smee, on the Potato Plant, p. 160.

work. At the beginning of the experiment, eight were in good health, two in indifferent health. At the end of the time, all were in good health, and had gained, on an average, more than four pounds, only one man having lost. The greatest gain was nine pounds four ounces. The one who lost was reduced five pounds two ounces.

Another set received the same fare, excepting that the potatoes were baked. They were found far less nutritious than the boiled. The prisoners lost, on an average, one and a half pounds' weight. The subsequent addition of a quarter of a pound of meat did not add to their weight.

In the *second* experiment, ten prisoners were fed thus: breakfast, two pounds of potatoes, boiled; dinner, three pounds; supper, one pound per man. At the end of two months, the health of all was good; there was an average gain in weight of nearly three and a half pounds; the greatest gain, eight and a quarter pounds; only two lost a trifling quantity. The prisoners all expressed their satisfaction with this fare, and regretted the change back to the ordinary diet.

It should be remembered that these experiments were made upon persons confined only to light labor. Probably potatoes would not furnish sufficient strength for long continued hard work in the open air.

Almost all domestic animals are fond of potatoes, and, in moderate proportions, they are wholesome, if not very nutritive, to cattle and hogs. Almost every farmer has his peculiar ideas upon this point, gained by his experience. Some of great experience do not think them profitable, if the expense of boiling and mashing with meal be taken into account; yet they admit that they are valuable as an alterative. Loudon, good authority in England, does not think they are as profitable a crop for stock as ruta-baga, carrots, or turnips; but opinions differ widely on this point. Low,* Professor of Agriculture at Edinburgh, says that "when boiled, they afford food in a high degree nourishing and salubrious." They may be given to dairy cows, or to any kind of cattle, for the purpose of fattening; but it is observed that boiled food is not generally attended with the same benefit to ruminating as to other animals. To hogs it is given

* Elements of Practical Agriculture, p. 425.

with the best effect. Even Loudon used to feed horses on potatoes, boiled and mixed with cut hay and straw, and judged that, for this purpose, one acre of potatoes went as far as four acres of hay. In Scotland this kind of food is given to horses, even when on the hardest work, and is found both wholesome and economical.

In this stage of our experience, it is impossible to affirm anything positively, as to the comparative value of potatoes as food for cattle. It is worth while for farmers to repeat and continue their experiments, keeping accurate accounts of the expense and the results.

3. Planting.

What ought we to plant? Large potatoes or small? The whole or a part? Or without reference to these distinctions? The reason is not evident, or, to say the least, has not been confirmed by sufficient experiment, why we should depart from the analogy of other things, which we must do, if we select for seed the smallest and poorest potatoes. We purchase, at high prices, the ripest and soundest corn, wheat, and oats. We carefully save that stem of a cabbage which ripens first. In raising domestic animals, we choose for parents the noblest specimens of their respective species. Deterioration follows a neglect of this rule. But of late years some farmers have chosen small potatoes for seed, and justify their choice by its results. It is possible that a large crop may be grown from such seed. But has the experiment been tried on a scale sufficiently large to justify us in laying down a general rule? One of the most intelligent farmers in this county prefers small seed potatoes, for the reason that they are *less ripe* than the largest; that they have a greater power of reproduction than those which have exhausted their energies in growing and ripening; and that plants raised from unripe tubers are earlier and stronger than from over-ripe. If there is any force in this reasoning, would it not be better to dig the potatoes intended for seed a little before they are quite ripe, when the stalk begins to wither, and then to save for planting the fairest and largest? These will produce not only larger potatoes, but a greater number of them.

The best cultivators in England plant only the finest specimens. Professor Low says, "when proper care is bestowed, large and well-shaped tubers are selected for planting." Von Thäer says, "small

tubers have not the same power of germination as larger ones." Mr. Knight plants potatoes whole. When anxious to get the very earliest, he removes all the eyes but one, that the growing stem may get an abundant support. He starts that in a hot-bed, and transplants as soon as the weather will allow. By this method we have known potatoes to be ripened a fortnight sooner than they could have been ripened by common field culture. Humboldt calls the cutting of the roots into small pieces, a bad custom, which occasions degeneracy. But for main crops, Mr. Knight cuts large potatoes, probably from regard to economy, while others, of equal celebrity, insist that it is better to plant the tuber whole. Some think one eye sufficient, on the principle that the strength of the stem will depend, at the outset, on the piece planted, from which it derives its nutriment. This would forbid the planting all the seed; for where a great number of eyes shoot up together, the stems must be weak. And where the stems are weak and crowded, we may expect a small crop of small roots. It is well known that eyes from the seed end of the tuber furnish the earliest crop, especially if one eye only is left upon the whole root.

The plant forms tubers until the flowers appear; after that time, it ripens them. Some cultivators infer, from these facts, that if you would have the fruit ripen early, you must remove the flowers and flower stocks, that none of the energies of the plant may be expended in ripening the seed. Mr. Knight asserts, that cutting off the blossoms also increases the yield. He puts the additional yield up to the high figure of one ton to the acre. The early formation of the tubers is said to delay the blooming; while the blooming and the ripening of seed delay the growth of the tubers. Hence the practice of compelling some early kinds to produce blossoms and seeds contrary to their habits, namely, to remove the tubers from the hill as they are being formed. By this means all the energies of the plant are concentrated upon the stem and the organs of fructification, and blossoms and seeds are produced.

The time of planting, the quantity of seed, the kind of soil, the amount and quality of manure, the method of culture and preservation, are all worthy of special notice; but the limits assigned to this essay forbid us to enter upon them.

4. Diseases.

All other disorders to which potatoes are liable, are overlooked in the presence of the modern rot. A disorder so wide-spread and so destructive has of course attracted the attention of practical and scientific men in many countries; and all the resources of learning and skill have been applied to the investigation of its causes and its remedies, hitherto with small success. At least, they have only shown, not what the cause is, but what it is not. The universality of the evil proves that it could not have been occasioned by blight, insects, climate, or soils; for it is not to be supposed that these were everywhere, and at the same time coöperating to one end. Besides, these causes existed long ago, and did not produce the results we now witness. As to insects and fungi, they may be regarded rather as effects, than as causes of the disease. A true theory must account for all phenomena, and a true remedy reach all similar cases. In both points, recent researches have signally failed; and from various quarters we learn that investigations are abandoned in despair of attaining a satisfactory solution of the difficulty.

I am not disposed to increase the number of unsuccessful physicians; but shall only suggest a few thoughts respecting the proximate causes or aggravations of the disorder. I suppose they are nearest to the right, who consider the continued propagation of the plant without renewal from its original climate and soil, and its over-stimulation by strong manure, as, at least, secondary or auxiliary causes of its decay. We should not forget that the plant we cultivate is not the original potato in its native home, where it doubtless preserves its health from age to age, like other wild inhabitants of the forests. Scarcely any foreign plant has been subjected to a discipline so severe; to methods of culture so different from what nature appointed for this. For some purposes we have changed it for the better; for instance, in the quantity and quality of its tubers — making them not only an abundant but palatable article of food. But this result may have been attained at the expense of health. Not that the potato is actually running out and is about to die. That seldom occurs to any plants, and especially unlikely is it to occur to those propagated only by seeds; although they may and do degenerate to such an extent as to render their cultivation unprofitable. And this process is hastened by modes of culture different from those by which the plant naturally propagates itself. In its wild state, the potato produces small tubers and long tops. We have increased the fruit and

diminished the amount of stems and leaves — an operation that may have occasioned a great change in its constitutional condition. The energies of the plant are withdrawn from its own nutrition and determined towards the production of fruit to such a degree, as to cause its debilitation and decay — an effect with which we are familiar in fruit trees. In a temperate, mountainous country, it probably continues to live in high health. But it has been transported to every variety of climate and of soil, and excessively, and, of course, unnaturally, stimulated for the sake of large crops. We know the effects produced on some other plants by a similar course. If a pear tree is over-stimulated, the new wood will not ripen. If wheat is over-stimulated by animal manure, the stalk is rank, tender, liable to rust, and bears no fruit, or very little. Some garden vegetables so treated disappoint our hopes altogether. Why may not similarly unfavorable results occur in potatoes, by pursuing a course of treatment so foreign from that which nature observes? — Why are potato-plants grown on a good but unmanured soil, less liable to rot than others? Because, in this respect, they are situated more like the wild plant. Excessive stimulation by manure increases the amount of cellular texture, and makes the tuber softer and more spongy, — and hence more subject to decay; more likely to be affected by unfavorable atmospheric conditions. And when this course of unnatural treatment is continued for two centuries, it is not strange that, although the amount of yield is increased, it may be done by undermining the health, and perhaps diminishing the vitality of the plant. Probably Nature has limits beyond which her perversion cannot be carried with impunity.

Besides, in its wild state, the potato propagates itself by seeds as well as by tubers. From recently grown seeds, it annually renews its youth and health. And wild plants, which re-produce themselves without human aid, resist tendencies to disease better than cultivated ones. But we have checked the potato in its habit of re-production from seed, because we wanted an increased yield of tubers — a result attainable, in part, by preventing the plant from following out its natural tendency to produce seed. We gain in one direction, and lose in another.

It has often been suggested, that we might perhaps recruit the failing health of the potato, by raising it from seed; and experience teaches us, that potatoes so raised are usually best for the table.

But seedlings rot as much as potatoes raised from tubers. Why not? They come from the seed of diseased tubers. The seed partakes of the general deterioration. Whatever may have been the primary cause of the disease, it has infected the whole plant. And raising from seed neither invigorates the vegetative principle, nor checks the tendency to decay. There is a defective constitution, the vitality of which cannot be so restored. The disease is a constitutional debility, resulting from the unnatural circumstances in which the potato is placed, analogous to readily acknowledged causes of decay in other plants. Some kinds do not rot much; others are almost destroyed; and all kinds are more or less affected. Some may have been cultivated for a shorter time than others, and now have a sounder health. We may also be ignorant of some conditions, which, besides long-continued and unnatural cultivation, may be requisite to produce the result. Where it is so difficult to pronounce positively upon the primary cause of the disease, may we not be justified, in the absence of any other tolerable theory, in regarding the result as proof of deterioration?

Does it not favor this theory, that potatoes planted on light, dry, and especially on new land, are less liable to rot, than on heavy, wet, and manured land? It is reasonable that this should be so, because the former condition is an approximation to that of the original plant. Potatoes thus grown will produce a smaller stem and fewer leaves, and though the tubers may also be small, they will be good flavored. In the new and fertile land on the bayous of Louisiana, the tubers are said to be as large and as good flavored, as dry and nutritious, as any raised elsewhere. From Bermuda also are brought our best early potatoes. If such a culture will not restore health, it may cause the disorder to assume a milder form. And while the whole subject is environed with doubt, and the origin of the disorder has baffled the sagacity of the wisest phytologists, we may well speak with modesty of remedies. But there seems to be reason in planting either on new land, or on light land, enriched with straw, clover, leaf, or other vegetable manure. Whatever manures be used, the land should be light and dry, and easily accessible by the sun.*

---

* It may be in place here to inquire whether a part of the failure of the potato crop may not have resulted from the slovenly manner in which this plant is frequently cultivated. We plough once, throw into a hole some strong manure,

Great care should also be exercised in selecting and planting the finest varieties of seedlings. Nor should it be forgotten that too much importance has been attached to the transportation of potatoes for planting to localities distant from those in which they grew. The gain from that practice will hardly pay the expense. Seedlings adapt themselves to their home, and do as well there as elsewhere.

But it seems to me that our chief hope of success lies in planting potatoes and seed brought directly from their native country and their wild state. Even should it be true, as it has been sometimes asserted, that such a course is not absolutely certain to be successful; yet it is much more likely to be so than any hitherto proposed. We can thus start anew; and with the multiplied facilities of science, and with hosts of intelligent farmers and gardeners, we may, in a comparatively short time, restore this important plant to its former health and productiveness. It is the duty of those having the means and opportunities, to use them in a work so intimately connected with the pecuniary and social prosperity of the people. Nor would it be improper for the Government of the United States to instruct its diplomatic agents to institute inquiries, and to make personal examinations touching this subject, in other countries. It is said* that there are some kinds of potatoes cultivated in South America superior for table use to any known among us.

We have heard that distinguished agriculturists in this County have received and planted wild potatoes from New Mexico. We have read also in the Patent Office Reports statements that wild potatoes, or what have been thought to be such, have recently been found in that part of the country. It is well to receive this latter account with caution. Humboldt and other eminent botanists assert, that the potato is indigenous only in Chili; yet recently it has been said that wild potatoes have been discovered in Peru.† Certainly

---

and press upon it the half-pulverized earth. Heavy rains beat down the ground, and render it so solid as to be almost inaccessible by atmospheric influence. If the ground were ploughed deep, then cross-ploughed, then harrowed and made fine and light, so that the sun, air, and rain might have free access to the plants, there is reason to believe that the increase of the quantity, and the improvement of the quality, of the crop would repay the additional expense.

* Sabine, Lond. Hor. Soc. Trans., vol. 5, p. 249.

† Lambert's Journal of Science and Arts, vol. 10.

they have never before been found in North America. There are many plants with tuberous roots, and inaccurate observers may possibly have mistaken some of these for potatoes.

In conclusion, I would observe that the potato disease will answer at least one good purpose "if it compels us to extend our knowledge to other kinds of food, which have been till now either unknown or unappreciated." Is not our prejudice against new things inconsistent with our general enterprise? Perhaps rice, sago, tapioca, and oatmeal would not furnish a complete substitute for potatoes; but, with a genius for cookery, they might be worth more than we now make them. One-third of all the people on earth are mainly supported on rice. Would not that be a good fashion which should bring it into more common use among us? Motives of patriotism might unite with those of economy. There is a tradition that, in the early times of Massachusetts, the people agreed to use salt fish for dinner one day in the week, as an encouragement to the fisherman. Salt fish dinners on Saturday still commemorate the fact. It is easy to imagine how rice might be more extensively used in our domestic economy; and that we might find it both palatable and profitable. The introduction into general use of a new vegetable would render us less dependent on present supplies, and cause less regret for the failure of any, however important.

AN ADDRESS

BEFORE THE NORFOLK COUNTY AGRICULTURAL SOCIETY,

DELIVERED BY

CHARLES M. WOOD, VETERINARY SURGEON, OF BOSTON,

NOVEMBER 17, 1853.

—☒—

GENTLEMEN — I come before an audience who are, doubtless, somewhat acquainted with the subject on which I am to speak; and, therefore, I am not here as a teacher; and perhaps, to some of you, I may not be able to furnish anything new. I only come here to set forth, in a condensed form, and as briefly as time will permit, the importance of veterinary knowledge, as connected with agricultural pursuits. I am only doing what many others are able to do: giving my time to condensing matters that may be useful to all owners of horses and cattle; to all such as have given no attention to the subject, and who may be gratified at having placed before them, at short hand, the results of investigations and of experience, which they have neither the time nor opportunity to do.

I think I can offer nothing, on my part, to yourselves and the Society, with more propriety, than the consideration of the effort now being made to combine veterinary knowledge with agricultural pursuits. It is a just remark, and those whom it chiefly concerns are beginning to appreciate it, that no department of natural science is incapable of yielding instruction. And to no class, perhaps, are the results of scientific research so practically important, as to the owners of cattle of all kinds, and to the cultivators of the soil; for no art is so connected with all the natural sciences, and so dependent upon them for

its advancement, as agriculture. If the farmer's crops are threatened by insects, zoölogy will throw light upon their nature and habits, and teach him how to destroy them. If he would know what varieties of domestic animals may be most advantageously raised for any particular purpose, or how certain qualities may be obtained by cross-breeding, zoölogical knowledge will afford him important aid. It is true that many useful results have been obtained by mere accident, and pursued apart from all considerations of the why and wherefore; but it is no less true, that we know not half of the nature of any such discovery, until we understand the principles on which it rests, and can apply them, intelligently, to analogous cases.

When we consider the loss of stock which the farmers annually sustain in this country, to an amount which would seem incredible, and the feeble efforts made to diminish it, the importance of this step may be admitted by this class of persons particularly, and by the community at large, especially, when it is also considered into what hands the treatment of most of the diseased animals has been committed. We have, in many parts of the country, agricultural societies for the collection and diffusion of agricultural knowledge; and it is advancing, with giant strides, under the powerful influence of chemical and geological studies. Let us hope that the inculcation of the humane treatment of the inferior animals, may not be considered as beneath the notice of these institutions. Mr. Youatt, an excellent authority, states, in his introduction to his book on cattle, that Great Britain contains a million and a half of horses, and over eight millions of cattle; and that his statements are deductions from statistical facts. We suppose that our own country contains almost as many.

Is it not, then, remarkable that so long a time has been allowed to elapse without an effort being made to preserve and secure the possession of so much of the wealth of the country? The owner of valuable animals at the extreme point of danger from disease, has not thought it worth while to call in the best medical aid, thinking animals would get well without a doctor. But, of a sudden, he begins to be alarmed; and he sends his messenger to tell Mr. —— to come directly. Mr. —— comes; and by his skill and attention the animal is saved and restored to health. This is gratifying to the owner and to the doctor; and many flattering things are said to the doctor, and it would be supposed a lasting impression has been made.

But often this is found to be a mistake; and, on another case occurring, the merest pretender is sent for, to avoid the *cost* of employing the scientific man! Such instances are not, I regret to say, uncommon; and thus the fair fame of the regular and successful practitioner is put in jeopardy, by being called in at the eleventh hour, while the preceding ten have been lost in malpractice. I may be allowed to express a hope that my remarks may be instrumental in drawing attention to this subject, and that more regard may be devoted to our too much neglected domestic animals, in the necessary application of medicines for their relief. Now, when we consider the value of the horse when living, and his worthless carcass when dead, we think his well-being is worthy of our consideration; and thus he is referred to as the leading subject of many of our remarks.

The cow is valued according to the quantity and quality of her milk, and when that diminishes, she is hurried off to make way for another, herself paying the principal cost of the exchange. Not so with the dead horse.

To show the lamentable ignorance of many of those who have charge of the lives of animals entrusted to them, I will relate a fact I know to be true. Some time since, one of those pretenders to veterinary knowledge attended a horse belonging to a gentleman in the vicinity of Boston. The horse died: when the owner inquired the cause of his death, the horse-doctor answered that he died of inflammation of the *gall bladder*. Now, the horse has no gall bladder, but the learned doctor did not know it! These men have usually some recipe (of great value, but a profound secret!) for the cure of every ailment a horse is liable to. We still live in an age of empiricism, both in human and veterinary practice, when Brandreth and Swaim can contrive to amass their one hundred or two hundred thousand dollars, by gulling the community with the astounding virtues of their pills and panaceas. But the veterinary art begins to assume the aspect of a science in this country. Its professors and practitioners are becoming not only more numerous, but begin to reckon as among them persons of talent and education.

There has been a period in this country, when veterinary medicine was confined, almost exclusively, to persons who considered an attainment in scientific knowledge was in no way conducive to its successful pursuit; by whom the possession of a few recipes, and a little mechanical tact, were deemed sufficient passports

to practice. We are happy to say, this state of things is passing away. Yet, even now, ignorance will sometimes obscure the dawn of brighter days, and operates in a manner highly injurious to the full application of correct principles. This, in our profession, is most evident in diseases which affect horned cattle.

Gentlemen, noble as is the horse, and valuable as are his services, and however much, individually and nationally, we are indebted to him for wealth, influence, and importance, these can offer no reason to disregard the other domestic animals, or refuse them our fostering care and protection in sickness and in health. Whether I do or do not succeed in placing this branch of science on its true and proper basis, I feel satisfied I shall have no cause to regret the attempt. And I can assure you, that nothing less than a sense of duty to my profession, could have induced me to appear before you.

With these few remarks, I throw myself on your candor, and kindly ask you to give me your attention, while I enter more fully into the subject.

It would seem that at least the *feelings* of stock-owners are roused to the necessity of a more accurate knowledge of the diseases to which the animals reared for the good of man are liable. But alas for the present well-being of our stock-owners! diseases frequently appear among their stock, which can be arrested only by veterinary knowledge. Some few reflective minds have taken a lively interest in the matter, while the more numerous masses have laughed in their sleeves, and believed that Nature, all-powerful as she sometimes proves, overpowering every effort that wilfulness, ignorance, and presumption can devise for her destruction, would again bear them through. It appears that, in times past, the more ignorant and brutal a man was found to be, the better estimation he had accorded to him, on all points connected with the diseases of our domestic animals. But if a man, previously fitted by study and reflection, knowledge of principles and extensive acquaintance with the laws of life, in health and disease, made an attempt at amelioration, or uttered a voice of warning, neglect was his only reward. This picture is, unfortunately, too faithful to truth. But this persistence in a bad course is fast being removed. Now the cry throughout the country is for assistance. From whence is it to come? Many have attempted to explain, and made confusion more

confounded. Still there is hope, and, though at a late hour, much good may be done. Owners of horses and cattle have to thank themselves for a great proportion of the losses they suffer; their most extraordinary persistence in the opinion, that the teamster, groom, or coachman, or the itinerant quack, (who invariably comes from the lowest and most ignorant of the people,) is the sole depositary of the science, abstruse as it is, and, as yet, unexplored; that such men as these could alone know and treat all the maladies to which horses and cattle are liable.

How often have I been taunted, in the prosecution of my practice, that the teamster, or hostler, must know as well as I, or better, because he daily fed, groomed, and worked the animals. In other words, that the men who know how to clean the stable and cow-house, and drive cattle to pasture, or water, must imbibe themselves more knowledge than the man studying the subject, coupled with all the knowledge of routine attendance, (of which *they* are so proud,) could possibly attain, and thus throw light on points involved in obscurity, or overlaid by ignorance, and reduce, thereby, to simple rules and simple treatment, diseases hitherto fatal. However, gentlemen, what is passed cannot be recalled. But if the agriculturists, as a body, will only encourage veterinary surgeons in their efforts, they will find those who are willing and able to carry out the subject to its fullest extent. But, above all things, that incubus which rests upon the whole subject of veterinary medicine, must be cast off. I mean that load of nostrums, false views, and that host of rubbish which has been so long accumulating, and which sprang from ignorance and folly. Let *this* be done, and read that book which never errs, and which is so open and legible that he who runs may read—the good book of nature; and much that appears wrapped in mystery and attended with difficulties, (if not impossibilities,) will become unfolded, and prove to be simple and easy of remedy, when referred to its real cause.

It would seem hardly necessary for me to show how indispensable is a knowledge of the proper treatment of domestic animals to the farmer: to him who makes the most use of these animals, and whose wealth is, in a great degree, comprised in their possession and proper treatment. But there are many truths, which require to be often repeated to be borne in mind, especially when by a long-continued course of erroneous management, what is wrong becomes to be con-

sidered right and proper. It is worthy of consideration, that while other things have gone on, in the march of improvement, some things have remained unmoved, and have felt none of the new influence. The force of habit is so powerful, that even when it can be demonstrated to be bad, there is a strong reluctance to set about a reformation. While we admire that reverence for ancestors, so distinguishable in the New England character, we cannot admit it should be carried so far as to shut out all the benefits to be derived from later discoveries. It must be admitted, that the agricultural interests of New England have received great benefits and pecuniary advantage from the introduction of new races of animals; new seeds of plants; new modes of raising various crops; and new methods of preparing lands for the seed. The long legs, tombstone faces, and lathy bodies of the old race of cattle have, in a degree, disappeared; the sheep, remarkable only for size and quantity of bone, and for their power of surmounting fences, have been nearly cut off; and the pigs, looking more like lean dromedaries than swine, have made their last appearance in the regions where the light of new truths has penetrated; and the old races of our horses have been still more benefited by the introduction of a better stock, by the importation of males and females from the improved races of Europe. With these improvements have risen the prices of our domestic animals. And, as their feed is much less costly than was the feed of the old and bony cormorants of other days, *that* expense also has been saved to the farmer. And our experimental agriculturists have gone further: they have improved many of the imported breeds by admixture with the native races. Much more will be effected in time to come, beyond all question. The march of improvement is not often stopped, when attended by profit and blessing. Even the most obstinate of the old school, who fondly believed in the perfect wisdom of their fathers, cannot but look grave when they see the stock of an enterprising neighbor look far larger, fatter, and more healthy, and commanding thrice the prices of their own stock. The argument to the purse is very convincing, and it is one to which a New England man never turns a deaf ear or a blind eye.

So many experiments of the vast benefits accruing from the admixture of blood, have been made, and made successfully, that no one who has examined can reasonably entertain any doubt. The same law which we see operating in the human race, is applicable to

all the races of animals. If certain families among men continue, through several generations, to intermarry, it is sure that the progeny will deteriorate — that both body and mind will gradually fail in their proper and natural powers. And, on the contrary, races of all animals may be restored and much improved, in size, vigor, and intellect, by admixture with other distant races, where there is no affinity, and where they have been reared in climates somewhat different in temperature. By due attention to the admixture and transposition of soils, we shall find that the want of artificial manures will not be felt, if the produce of the farmyard is husbanded and properly applied. We believe, that by careful attention to this, the production of grains on our New England farms has, within a few years, been more than doubled. If, by assiduous attention, such improvements may be made by the farmer on his lands, he may be assured that equally remarkable results will follow from attention to the breeding of his animals. And when we consider that from this fund, — the barnyard, the pigsty, and the sheep-pen, — will be derived the greater part of his income in money, it will be conceded that the subject demands his careful and anxious inquiry. Hence the health of these animals is a matter of much importance, and therefore he should understand and know, to a certain extent, the diseases of his domestic animals. It is not possible to prevent all illnesses among animals, by care and attention, although much may thus be effected. There will be epidemics and sicknesses among them, as among families and communities of men. Now, how much better it is, and how great a saving of expense, for the farmer to know himself the diseases of his stock. We know that there are some diseases that will require the skill and experience of the veterinary surgeon; but there are many slight illnesses which ignorant treatment may convert into dangerous diseases, which, if understood, might be easily managed and quickly subdued. And it is my object, in addressing you, to excite your interest in veterinary science, in connection with agricultural pursuits: so that when diseases appear, they may not be mistaken nor mismanaged. But there are some diseases to which animals are liable, of so aggravated a character that no one can be expected to safely manage them but the experienced practitioner; and the treatment depends so much on the symptoms, and is so various, that none but an experienced hand can safely minister to their relief; and any rules laid down

for their treatment would be more likely to do harm than be a benefit.

In regard to the *improvement of the breeds of domestic animals*, I shall confine myself to a few general remarks, descriptive of their properties, and of the mode of *crossing* to be observed in breeding; and in so doing, I aim especially to excite discussion and rouse attention. When you consider the immense amount of property invested in domestic animals throughout this vast country, you will readily admit the importance of the subject.

We will begin with the horse. He is long in coming to maturity, is liable to many accidents, and very often disappoints the hopes of his owner when he arrives at a salable age; and these may be traced to a want of knowledge in breeding. Bakewell's motto — "like produces like" — is found to be true, and, therefore, it follows that it is folly to breed from any but sound and perfect animals. If we desire to get rid of the races that eat more than they can earn in value, we must be guided by this rule. But we know that mares, for instance, are selected to breed from, which are good for nothing else: as they can earn nothing, by reason of their infirmities, they are made to breed, and thus the mare transmits her diseases and her worthlessness to her offspring. In this way a breed originally good may deteriorate, so as to be good for nothing, and the breeder finds, instead of profit, he has been a great loser.

Another common error is the breeding from a favorite mare, without any consideration of her qualities as a brood mare. She may be good for work, and yet be unfit for a breeder. And, if her vital functions are impaired by a long life of toil, she is incapable of having a sound and healthy offspring. You cannot have a valuable offspring from an undersized, worn-out, and misshapen dam, however useful a servant she may have proved. Another error is, that of crossing between a sire and dam of opposite descriptions and character, without regard to the kind of animal sought to be produced. Fancy should, in such cases, be governed by judgment, or we shall produce an animal which is a mongrel nondescript: neither saddle horse, nor carriage horse, nor hack, nor team horse. So we see that the parents should not only be as perfect as can be found, but be well assorted in the crossing; for if one has an excellence, and the other a counteracting defect, we may not expect

to secure any excellence in their offspring. We therefore give the following rules, to be observed in breeding.

1st. Breed from none but sound and healthy parents—free from all natural infirmities.

2d. Breed from the most perfect in form and action: and see that a tendency to the same defect does not exist in *both* parents.

3d. Breed from animals of a distinct and positive character: and take care that both male and female are so assorted as to insure a certain description of offspring.

In regard to the *first* of these rules, I cite some cases in point.

A foal was dropped, blind. The mare had good eyes, but the sire's eyes were defective, and all his stock had imperfect vision. A mare was subject to farcical enlargements, or swellings. She had a foal. Soon after birth it showed symptoms of farcy, and died, before ten months old, of glanders.

A mare, running at Epsom races, broke her leg; the fracture was reduced, but the leg was crooked. Her filly foal had a deformed leg, on the same side as the mare, and precisely like it. Such instances could be multiplied to a great extent. But enough has been said to prove that "like produces like."

The causes of unsoundness in horses are so various that we cannot specify them in this place. They are the quicksands of breeding, and destructive of the hopes of the breeder. Unsoundness, or malformation of the feet; the most common of which are contractions, navicular disease, and quarter crack; unsoundness and malformations of the legs, such as splints, spavins, ringbones, crooked and ill-formed joints, causing faulty actions, and a hitting together of the legs; weak or sprung knees; diseased eyes, or imperfect vision; affections of the lungs and windpipe, as broken wind, roaring, whistling, &c. So, of habits; such as cribbing, baulking, kicking, and shying, &c., and many constitutional diseases, such as farcy or glanders, to which there is a hereditary tendency. Some of these may be counteracted by an opposite tendency in the cross, but it is best to consider such animals as unfit for propagation.

As to the second proposition, the same defect existing in both animals, male and female. From what has been already said, we see that this is especially to be avoided. For it is almost certain that the offspring will show the same defect. The bold, animated counte-

nance and active step, the light heart, and resolution to go through the labors required of him, upstanding carriage, and fine proportions of form, are the characteristics of a perfect horse, of any description.

It is a common error to breed from tall and long-legged mares, thinking to get fine tall horses. The mare best calculated to breed fine stock, is one that is short-legged, with a deep, roomy chest and carcass, and sound, constitution, and powerful vital and nutritive system, indicative of great powers of generation and nutrition in the formation and rearing of the young. The celebrated Dr. Cline has shown, that by putting a small male with a large female, an offspring will be produced abounding with blood, the heart will be large, the lungs expanded, and the chest capacious. But if the male be large, and the female small, the offspring will be cramped in utero, and the result will be entirely different.

4th. We like a lengthy, well grown mare, on short legs, good chest and carcass, good constitution, and capable of supporting and sustaining the drain upon it of suckling a hearty and healthy progeny. Some farm horses will do half as much more labor, in a day, than others, from superiority of their *action*.

How great is the value of this property to their owners. So, in travelling, drawing loads, &c., what a saving in horses able to walk rapidly and cheerfully along, without being distressed by the pace.

We often see little light, weedy mares, of mongrel breed, put to great, overgrown heavy horses, of no definite breed or description; or, reversing the arrangement, great, coarse, team mares put to a well bred horse, without reference to his aptness as a cross for the mare. No calculations can be formed as to the character and description of the produce. Mongrel horses are usually wanting in courage, constitution, form, action, and every valuable property. There is an old adage, that "horses go well, in all forms." But I will say, that I have never seen a fine goer very ill shaped; or the converse. While I am willing to leave, to such as prefer them, what a noted character (John Docray) called "three cornered, impossible brutes," I will confess my own taste would lead me to select the most perfect animal in form I could meet with. I have not yet said anything of the color of horses. But, in spite of the old adage, that "a good horse is never of a bad color," it is said that light chestnuts, yellow bays, and light grays, are not only objec-

tionable to the eye, but that the color is indicative of a delicate constitution. White legs should also be avoided, particularly the forward legs, as terminating in white hoofs, which are always weaker and more liable to disease, than black ones. And let me here suggest, that, in the rearing of foals it is of the utmost importance to feed them well, and shelter them, particularly during the first autumn and winter. If they are half starved and checked in growth, at this period, they seldom attain the same amount of bone and sinew that proper attention, during the first year, in a great measure secures.

Some general remarks I will now make in regard to the cattle of this country. Our cattle and sheep were, originally, brought over from England, by our forefathers, the pilgrims. And our cattle were, most of them, of the Devonshire breed, the part of England from whence the pilgrims came. But, in the course of time, they have been mingled with other races; or have run out, or nearly so.

The foundation of all improvements in stock, and its successful management is, as I have before said, the rule, that "like produces like." This is the great law in every portion of animated nature. If, occasionally, the intellectual or imaginative power may control the organic, that organic principle is in full activity, and will surely be revived in the generations to come. This law, of like producing like, gave birth to a most valuable breed of sheep; the Bakewell breed. And to the short horns, among cattle, whose superiority is every where acknowledged and established, to this day can be traced, in the best of English cattle, the lineaments of their ancestor, "*Favorite.*"

Suppose a farmer has a good stock of cattle, with only some defect among them. He remembers the rule cited above; and he looks for a sire which has the excellence he wishes to engraft upon his own stock. Now, he often fails to obtain an improvement. For this new sire has his own defects; and although the object of getting rid of a general defect in the farmer's stock may have been successful, yet other defects appear, derived from this new sire. Now, there is but one way, as with horses, to prevent this transmission of imperfections. And that is, by having both dam and sire selected, as nearly as possible, without fault. Both must be as nearly perfect as possible, and after a few generations, an attention to this rule will show a stock of superior qualities.

The effect of the imagination is not a little remarkable in cows. An ox, with white spots, has been known to leap a fence and harass a cow, in an adjoining pasture, when she was in heat. Now although this cow was submitted to a bull of the best breed, yet her calf was spotted, like the ox. This fact shows how much care is requisite in breeding, and how the imagination, in even such animals, affects progeny.

When this carefulness of selection from sire to son, has continued through several generations, animals will be produced of great perfection of form, and possessing such qualities, in a high degree, as have been sought by the breeder. And the males will possess them in a higher degree than the females can. They will become a part of his constitution; and he will communicate them to his offspring. The high bred cow's excellences will preponderate over the half bred bull, for her excellences are hereditary, and an essential part of her. The best beast for a farmer, is that which suits his farm the best. The dairy man will look to the richness and quantity of the milk. The grazier, to the quantity of the meat and facility of fattening, and to the *parts* on which fat accumulates; and he looks especially to the hardihood of the animals, and their adaptation, in constitution, to the climate and soil.

Now, the farmer should understand perfectly the character and qualities of his own stock. And, by examining into their minor deficiencies he may remedy them all, by looking to the breeding. And when he has an animal showing some material defect, he will not suffer that animal to have progeny. Nor will he long confine himself to his own stock, unless it is very superior. The breeding "in and in," has many advantages, to a certain extent. We produced the Bakewell and the Collings breed of sheep. It has now become a rule, with many agriculturists, to effect some change in their stock every second or third year. And this is done by introducing a new male. And this male should be of the same sort, but possessing no relationship, or very distant, to the stock to which he is introduced. He should have all their good points, and if possible, some improvement on the race he sprung from; and above all, a hardy constitution.

A breeder should never forget that good keeping is essential. All stock must be bred with attention, and be well fed. For the

improved breed will lose ground, and most rapidly decline, from poor feed.

The proper age for breeding depends on various circumstances. Among the short horns, the heifers should run till two and a half, or three years old. For their young are then larger, finer, and more valuable, although the cost of their keeping must be taken into the account. The custom of putting the heifer to the male at one year old, cannot be too strongly condemned.

The bull should not be suffered to run with the young stock. He had better be separated from them altogether. He will come into season at two years old, but is better at three.

Gentlemen, I have said that the book of nature is open to all, so that "he who runs may read." In the field of science there are no inclosures or "preserves," for the benefit of a favored few. No line of demarkation obstructs the progress of the inquirer after truth, as if to say, "Thus far shalt thou go, and no farther." All, without distinction, are admitted, and are entitled to range with freedom, and may at all times indulge their curiosity and satisfy their thirst after knowledge, in any part of her illimitable domain.

"Thus, then, to man, the voice of nature spake:
Go! from the creatures thy instructions take:
Learn from the birds what food the thickets yield,
Learn from the beasts the physic of the field;"

"Thy art of building from the bee receive;
Learn from the mole to plough; the worm, to weave;
Learn from the little nautilus to sail,
Spread the thin oar, and catch the driving gale."

I would here remark, that I propose to deliver a course of lectures on this subject, during the coming winter; and that I shall endeavor to make those lectures as plain and interesting as possible. The way is yet untrodden, and I shall have to trace out a new path; yet by perseverance many difficulties may be surmounted. And as with our ordinary walks in life, so with this, — the longer we walk therein the smoother it becomes.

Gentlemen, I have done. Some of you, I fear, will have thought me tedious; and others will be inclined to say that I have

scarcely done justice to my subject. To the former, I would say that the importance of the subject, the conflicting statements respecting diseases, and the entire silence of the veterinary practitioner, are my excuse. And to the latter, I would hint the impossibility of compressing, into a single address, matter enough to fill a volume. For many of my observations, I have consulted approved authorities. But valuable observations, like truth, suffer nothing by transplanting; and I am pleased to have an opportunity to make them more extensively known. Gentlemen, I thank you for the kind attention you have given me; and hoping to have the pleasure of meeting you again, I respectfully take my leave.

TREASURER'S REPORT.

HENRY W. RICHARDS, *Treasurer, in account with the Norfolk Agricultural Society.*

DR.

Balance in Treasury, Dec. 31, 1852,	$584.66
Cash received, admission fees of 176 new members,	860.00
" " donations,	672.00
" " dividends on bank stock,	120.00
" " for right of subscription to new stock,	18.00
" " for 15 shares in Blackstone Bank,	1,575.00
" borrowed,	1,144.50
" received for grass sold at auction,	10.00
" " from the Commonwealth,	600.00
" " for admission tickets to Cattle Show, Dinner, and Ladies' Fair,	641.04
" " from Ladies' Fair,	1,028.26
	$7,253.46

CR.

Cash paid for printing, stationery, postage, &c.,	$473.15
" " premiums for 1850,	17.00
" " " " 1851,	7.00
" " " " 1852,	337.00
" " " " 1853,	211.00
" " balance expenses of Cattle Show, 1852,	29.37
" " Secretary's salary,	50.00
" " expenses procuring new members,	38.50
" " for fences, pens, and repairs,	161.49
" " for land,	405 00
" " for erecting Hall, and fixtures, in part,	3,450.00
" " insurance on Hall,	23.50
" returned, amount borrowed,	150.00
" paid for interest,	14.10
" " expenses Fifth Annual Cattle Show and Dinner, in part,	612.69
" " " Ladies' Fair, cotton cloth, &c.,	150,15
Balance in Treasury, Nov. 30, 1853,	1,123.51
	$7,253.46

The Society owe for money borrowed $1000. Their funds are invested in the Hall and Grounds occupied by them, including cattle pens, furniture, fixtures, &c., valued at $6,129.89.

HENRY W. RICHARDS, *Treasurer.*

Dedham, Nov. 30, 1853.

CIRCULAR

OF THE

NORFOLK AGRICULTURAL SOCIETY.

—※—

JULY 25, 1853.

The undersigned respectfully represent:—

That in pursuance of a Vote of said Society, in conformity with authority delegated to its Building Committee, a contract has been concluded with a competent Architect for the erection of an AGRICULTURAL HALL in Dedham, which it is believed will supply the present wants and promote the future welfare of the Society.

The site selected for this building faces the Common on the South, and the road to Needham on the East, giving an extended front with the side and pediment end, of one hundred and eighty-five feet. It will be two stories in height, of good architectural proportions, and cover an area of one hundred and thirty feet in length by fifty-five in width. The lower story will be appropriated for an Exhibition Room and offices for the Internal Departments of the Show; the upper story, a spacious dining-room, capable of seating at the tables one thousand persons, and will on other public occasions accommodate a much larger number. The whole is to be finished, painted and ready for occupancy by the 10th of September next.

To accomplish this object, the available funds of the Society will be exhausted, and further means must be obtained to meet the expense to be incurred by this measure. The extreme uncertainty, the great inconvenience, and the large expense of obtaining the Mammoth Tent, heretofore used for our exhibitions, render it not only desirable, for economy and convenience, but absolutely necessary to our prosperity and progress that a suitable and permanent building should be erected at once.

It is therefore hoped and confidently believed that the temporary

loan which may be necessary for the completion of this design will soon be more than cancelled by an increased interest in the Society, and a corresponding enlargement of its funds and contributions to its Annual Shows.

We appeal to the liberality of the good people of Dedham to aid by their means in finishing the building and surrounding grounds, so as to render this structure an ornament and attraction to their beautiful Common, which they are about to enclose.

We appeal also with confidence to the Citizens and to the Farmers of Norfolk County to sustain, by new and enlarged efforts, the endeavors of the Committee to secure the permanent welfare of the Society, and we believe they will not suffer an Institution which has contributed so extensively to the honor of the County and the State, long to want the requisite support.

We appeal, finally, and *especially*, and with the utmost reliance, to the Ladies of this County, so well known for their labors in every good work, to lend us their coöperation by establishing a Fair to be held in the building on the days of the Exhibition of this Autumn, thus presenting at once greater attractions to the Show and an addition to the receipts of the Treasury.

The Norfolk Society was the first Agricultural Association to admit ladies to the rights of Membership and to the enjoyments of the social festival. In this Society some of the Committees are composed entirely, or in part, of Ladies, and their judgment and experience are chiefly relied on in some departments of the Exhibition. Their presence and contributions have always been among the most inviting features of the annual gathering, and with their continued interest and exertions we cannot fail of success.

Therefore, we cordially and most respectfully invite them to hold a Fair, or public sale of articles, useful and ornamental, to be solicited from each town in the County, the net proceeds of which to be devoted to the completion of the Society's New Agricultural Hall.

Per order of the Executive Committee,

MARSHALL P. WILDER, *President*,
EDWARD L. KEYES, *Secretary*.

The above appeal was responded to in a cordial manner by the ladies of several towns, and also by liberal donations from gentlemen in various parts of the County, as will be seen by reference to

the pages of this Report. To the ladies of Dedham, Dorchester, Quincy, Medfield, and Needham, the Society are under especial obligations for their perseverance in the collection of funds, for their taste in the preparation, and for their energy in the superintendence of the Ladies' Fair; also to the citizens of Dedham for the erection of an Observatory on the Agricultural Hall. These favors were acknowledged by the following votes, passed by the Board of Trustees, at their meeting held on the 17th day of November, 1853.

Voted, That the thanks of the Society be presented to the Ladies of Dedham, Dorchester, Quincy, Medfield, and other towns in the County, whose liberal contributions and untiring efforts, on the occasion of the late Exhibition, have added so largely to the funds of the Society; and particularly to those Ladies whose presence and exertions at the late Fair gave so much interest to the occasion.

Voted, That the thanks of the Society be presented to those citizens of Dedham by whose generous aid a cupola has been erected upon the Agricultural Hall, and surmounted by an ornamental and useful vane.

ORDER OF EXERCISES AT THE CHURCH,

ON THE OCCASION OF THE

FIFTH ANNIVERSARY

OF THE

NORFOLK AGRICULTURAL SOCIETY.

SEPTEMBER 28, 1853.

—☼—

Agreeable to the programme of the day, a procession was formed at the Agricultural Hall precisely at 12 o'clock, M., under the efficient marshalship of Col. Thomas Adams, Sheriff of the County, and, preceded by the National Instrumental Band of Roxbury, it took up the line of march to the Rev. Dr. Lamson's church, where an address was delivered and other exercises performed.

A voluntary by the choir having been sung with happy effect, the Hon. Marshall P. Wilder, President of the Association, rose and addressed the assemblage as follows: —

LADIES AND GENTLEMEN OF THE SOCIETY,
AND FRIENDS OF AGRICULTURE.

The revolving year has completed another period in our history, and assembled us to celebrate the Fifth Anniversary of the Norfolk Agricultural Society.

While I regret the inauspicious state of the weather, I am happy to congratulate you on our personal prosperity, and on the progress of the society. "Our land has not cried against us, nor have the furrows thereof complained;" but Spring has sown, Summer has ripened, and Autumn has garnered a bountiful harvest. Nature from her store-house of plenty has poured around us blessings in rich variety and abundance, thus rewarding the husbandman, and blessing all the rural industries of life; "for the profit of the field is for *all*, and the king himself is served by it."

It is suitable that we should meet in this consecrated place, gratefully to acknowledge the Divine goodness, and to rejoice in the triumphs of science and art, so wonderfully displayed in our age, remarkable not only for enterprise and invention, but for combined and vigorous action — an age, too, when no friend of the cause of human advancement is permitted to loiter by the wayside, or to put his hands to the plough and look back.

To this progressive principle the Norfolk Agricultural Society ows its existence. It was the spirit in which it was born and nurtured — the spirit which animates and sustains its manhood, which has controlled all its movements, which has sustained its present prosperity, and established it on a permanent and honorable foundation.

Within the short period of five years, it has acquired funds to purchase the grounds on which its shows have heretofore been held; has paid for the structures and other accommodations for the stocks on exhibition, and the present year has erected an Agricultural Hall, a building one hundred and thirty feet in length, fifty-five in width, and twenty-eight in height. This edifice is pronounced by competent judges firm and durable. It is of good architectural proportions and external finish, and contains on the lower floor an exhibition room and offices; and on the upper floor a spacious dining and audience hall, sufficient to accommodate at its tables more than one thousand persons.

The whole expense of this edifice, its furniture, the ground on which it stands, with its enclosures, will not fall much short of four thousand dollars. Of the sum necessary to meet this expenditure, about fifteen hundred dollars will be appropriated from the sale of the Society's bank stock; which, with the liberal donations of sundry gentlemen, and the receipts from the Ladies' Fair and tickets of admission, it is confidently anticipated will come within a few hundred dollars of covering the whole expense.

For the increase of its funds the Society is indebted, among its donors, to Messrs. Samuel D. Bradford, John A. Lowell, J. Wiley Edmands, Robert C. Hooper, George R. Russell and Robert Roberts,* in sums of fifty to two hundred dollars each, and for smaller amounts to various other gentlemen, and also ladies. Also, to new members for admission fees, of which there have been added nearly two hundred the present year, giving as a total one thousand names on the roll of the Society.

We are also especially happy to acknowledge our obligations to the ladies of several of our towns, for their timely and efficient aid, thus affording another illustration of the happy manner in which they fulfil the appropriate mission of woman, whom God made man's helpmeet, in dressing and keeping the ground.

While we acknowledge with gratitude these favors, let us not be unmindful of the kind Providence which has in so remarkable a degree continued the lives and health of our members. On former occasions we have been called to mourn the loss of distinguished friends and members; but we now have the happiness to rejoice in the preservation of all the Society's Executive officers, and with only one exception, so far as my knowledge extends, — Nathaniel Colburn, of Dedham, — of all of its large Board of Trustees, ninety in number.

Brother Farmers, in conclusion, permit me to congratulate you once more upon the responsible and honorable position you occupy in society. At no former period has the Agriculturist and he who works with his own hands been more esteemed; and I rejoice in the belief that the time is not far distant

---

* Lyman Kinsley, Esq., of Canton, has since contributed fifty dollars.

when he "who driveth oxen, holdeth the plough, and whose talk is of bullocks," will take his appropriate rank with the wise and great: —

> "The great, whose might is *not* in crowns or palaces,
> In parchment rolls, or blazoned heraldry."

Rev. Mr. Babcock, of Dedham, in the absence, on account of illness, of Rev. Wm. P. Lunt, of Quincy, offered up an appropriate and peculiarly impressive prayer.

The choir then sang the following Hymn, composed for the occasion.

ORIGINAL HYMN.

BY REV. WM. P. LUNT, OF QUINCY.

"And it shall come to pass in that day, I will hear, saith the Lord, I will hear the heavens, and they shall hear the earth;

"And the earth shall hear the corn, and the wine, and the oil; and they shall hear Jezreel." [Hosea, ii, 21, 22.]

One cry, with never-ceasing sound
Circles Creation's ample round;
While all below and all above
Turn, genial Parent, to Thy love.

The corn, and vine, and olive fair,
Hearken to needy mortal's prayer;
And these from earth's all-fostering breast
Expect their fatness and their zest.

The mighty mother, for her brood
Careful to yield their wonted food,
Looks up and asks the heavenly powers
For quickening heat and softening showers.

The flying clouds and fiery ball
Listen to earth's entreating call;
But these implore a will divine,
For leave to drop, and power to shine.

Thus through creation's ample round,
One prayer is heard with pauseless sound;
While all below and all above
Turn, genial Parent, to Thy love.

The annual address was then delivered by Rev. F. D. Huntington, of Roxbury. As a literary production, and in every respect, it was characteristic of the author's well-known superior talent. Its delivery also demonstrated that power of eloquence for which he is no less famed. It will be found in the preceding pages, and merits an attentive perusal.

At the conclusion of the Address, another Hymn was sung, and the Benediction pronounced by the Rev. Dr. Lamson.

The Society with their guests then reassembled in procession, and under the influence of lively music and the peltings of the storm, returned with a quick march to the new Dining Hall.

THE DINING HALL.

Tables had been spread for one thousand persons, and although the weather was so unpropitious, these were nearly filled. The Hall was tastefully decorated with flags and appropriate emblems. On the west side, behind and above the guests' table, was a scroll, bearing the words

NORFOLK AGRICULTURAL SOCIETY.
FIFTH ANNIVERSARY.

On the west side, and in front of the Orchestra, was the following inscription: —

"From Agriculture are these blessings sent;
Wealth, Commerce, Honor, Liberty, Content!"

Immediately above the President's head was suspended (we hope not in the Damocles fashion) the WORLD'S PRIZE PLOUGH, presented to the Society by Messrs. Prouty & Mears, of Dorchester.

The Company being seated, the blessing of Heaven was invoked by the Rev. C. C. Sewall, of Medfield.

THE DINNER.

This was served up under the direction of Mr. Howe, of the Phœnix Hotel, Dedham, in capital style. That it was relished was liberally demonstrated by all present, among whom were a large number of ladies. This feature is one introduced by the Norfolk County Society, and ought to be universally adopted. After doing duty to the inner wants, the President called for order, and stated that the Judges would now make their reports.

The Reports having been read, the President introduced the intellectual entertainment in a speech of welcome to the guests and members of the Association. He congratulated the Society on the timely erection of the new and commodious building which now sheltered them from the inclemency of the weather, and which, by the social festivities of the hour, and the ceremonies of the day, would be dedicated to the cause of Agriculture, Industry and Art.

He gratefully acknowledged the indebtedness of the Society to those ladies who had so nobly volunteered to increase by their efforts the funds of the Society, by their Fair, and who by their presence gave countenance and support to the labors of its members.

He concluded his remarks with an allusion to the importance of the farmer's calling, and gave a sentiment in honor of Agriculture.

The President then gave a toast complimentary to the Commonwealth of Massachusetts, and as a response to which, he read a letter from Gov. Clifford, regretting his inability to be present.

The next sentiment called up the Orator of the Day.

Rev. Frederic D. Huntington responded in a brief, but felicitous manner, closing with the remark that as he had performed his full share of the day's labor, he should decline making a speech.

The President then introduced Charles L. Flint, Esq., Secretary of the Massachusetts Board of Agriculture. Mr. Flint spoke as follows:

Mr. President, — I shall not attempt to express to you the gratification which I have felt to-day. In passing around from one part of your exhibition to another I have marked everywhere the utmost degree of interest beaming in the eye and speaking in the tones of the farmers who have met to increase and strengthen in each other the spirit of improvement and progress. I cannot help contrasting in my mind the favorable circumstances under which we meet with those which characterized such exhibitions forty years ago.

It is now forty-three years since the first exhibition of the Berkshire Agricultural Society was held under the great elm tree in the public square of Pittsfield. We at this day, can form no conception of the difficulties, the almost insurmountable difficulties, with which the first projectors were forced to contend, — the opposition, the angry criticism, the ridicule of all classes of society. They conquered at last, and peace to their ashes, they died in the midst of honor and the blessings of a grateful community.

Your Society is one of the youngest in the State. It started into being under such favorable auspices that it may be said to have passed its infancy at a bound, and to have entered at once upon its full career of vigor and usefulness. The practical machinery of other societies had been carefully examined,

their excellences and their defects had been studied, and you have certainly succeeded in combining all their advantages while you have apparently avoided their defects. You may, therefore, teach those who taught you, as the lessons of experience train up the young and the new, till they, combining and arranging systematically all the best hints of their teachers, may be expected to excel them, and to be able to pay back in tuition all their debts to the old and the past.

Forty-three years! They carry us back to the times before the last war, when men, flushed with unparalleled commercial success in the East, began to look with contempt upon an occupation to which all alike owed their subsistence. Tales of untold fortune ran like an electric shock through the country, and every rich cargo that landed from its tedious voyage, drew many a youth from the plough and the sweet influences of the country, to measure tape by the yard, to copy legers and day-books, deluding himself with the idea that this was the only way to make a fortune or to win a fair lady!

Happily for the Commonwealth, this mania received a timely check. The tide was partially turned, and a few enlightened and patriotic men threw the weight of their influence into the opposite scale, and taught that the true wealth of a country was rather in the improvement of its agriculture. They embarked in agricultural enterprises, awakened a spirit of agricultural improvement, invested capital in farms, planted trees and orchards, and gradually changed the public sentiment till societies were formed in several counties, and the patronage of the State was secured.

These men deserve the grateful remembrance of their posterity. Others have done more for their country on the field of battle, or perhaps in the cabinet, but few have done greater real service than those who have devoted themselves to the improvement of the agriculture of a country. Among them indeed are numbered, in all ages of the world, the greatest minds, the highest intellects, and the noblest men. We hear of them, perhaps, as having achieved honor and glory in other lines of distinction, some of them heroes who fought for liberty and went down amid the grateful tears of their country, some of them statesmen who wielded a political power equal to that of kings and princes, but, beneath it all, was a deeper sentiment; the great interests of agriculture and its improvement lay nearest their hearts. Who that has read the agricultural letters of the great Washington, has not felt this?

Indeed the natural tastes of every man invite to it. Every heart yearns towards the earth. To look upon, to love and improve it, is no less an indication than it is the result of purity of heart. This, I say, is the natural instinct that binds us by something like a filial sentiment to the mother of us all.

I know there is still a perverted sentiment in the minds of some, a languid excess of refinement, which attaches a sort of contempt to the labors of the farm. I know it has happened within the memory of men still living, that the other arts, like proud and ungrateful children, have looked down with an air of patronage upon their parent, as if they did not owe their origin and their breath of life to the culture of the soil. I will not say what may have been

the cause of this, but I can say that no well balanced and ingenuous mind, be it merchant, lawyer, or statesman, — no man who has the real interest and happiness and glory of his country at heart, can look with indifference or contempt upon a calling which has constituted the truest happiness of the noblest men that ever lived, — men who have embalmed themselves in the memory of their posterity, the mention of whom is the talisman to fire the heart with patriotism, the Washingtons of the Revolution, the Websters of the present age!

It has always seemed to me, Sir, that the great want of New England was to make farming attractive. And here I can only echo the beautiful words of your orator to-day. If we would have our children follow farming as a pursuit, we must interest them in it, and fit them to pursue it intelligently. If the mind is not engaged, the toils of the hand are irksome and tasteless. If the mind is interested, if every thought, every feeling, every passion is aroused to improve and excel, no labor is wearisome, no exertion too severe. To make farming attractive to the young, they should be educated for it. And since life is short and knowledge infinite, they need not, perhaps, spend years of the best part of their lives in such studies as are necessary only to success in the law or in divinity. The time will come when the farmer will have more ample facilities for educating himself and his children. In the meantime a thousand objects, if properly observed and brought to notice, will begin the work, and that in the very points of greatest practical importance.

Suppose the young are taught to observe the character of soils and their adaptation to different crops, the structure and nature of plants, the habits of insects injurious to vegetation, the habits of the beautiful birds so often accused of theft, the great striking peculiarities in the different breeds of animals, and the means of improving them, — will they not have subjects enough to interest them in farming? They will find means of cultivating the finest fruits and ornamental trees, to beautify the house, and give it an air of neatness and comfort. A little taste in arrangement of trees and plants, added to a cultivated mind, soon finds within itself untold resources of living well and happily.

But the young, it is said, are ambitious, and cannot be satisfied with the reputation of good and successful farmers. They must go into the counting room to make money, and be known as men of wealth, or they must embark in the intricate studies of the law, and through that upon the greater uncertainties of politics, and achieve distinction, and, as they think, honor, (they don't always go together) in the eyes of the world. They forget the brighter and purer reputation of conferring some permanent benefit on their country in the improvement of its agriculture. They forget that the very men who fail at farming are men who would fail at anything else, and that their chances of success are equal in farming to what they would be in other pursuits, perhaps even greater, since the field is wider and nobler. I would rather have the reputation of doing something to improve the agriculture of my country than to have the reputation of Napoleon.

Mr. President, I have not overlooked to-day the beautiful handiwork of the ladies. I have a right to look with some interest both at their work, and I hope, at themselves, and I assure them that both are objects most gratifying to an Old Bachelor's heart! I give you, Sir, in accordance with custom:

THE LADIES OF NORFOLK—Give them their rights, and they will ask no higher compliments.

The Chair next called on the Clergy, and for whom the Rev. Mr. Babcock, chaplain of the day, answered as follows: —

I am glad, Mr. President, that the Clergy have a place in the associations and memories of this day. There is something congenial between the callings of the husbandman and the clergyman. Each is eminently pacific in his nature; and the care of the field is particularly suggestive of the duties of him appointed to serve in the field of moral and religious culture, under the eye of the Great Husbandman. The tiller of the soil prepares the furrow, and looks for a reward of his labors — first, the blade, then the ear, and afterwards the full corn in the ear. It is the divinely appointed order. He has a right, under the favoring influences of the genial sunshine and the early and latter rain, to expect his harvest.

He to whom the care of souls is given, learns his lesson from the field. He sows the word of divine truth, and, under the divine blessing, looks also for, first, the blade, then the ear, and then the full corn in the ear, in the result of a Christian life. Nay, Sir, he does more than this, and looks for a more glorious harvesting than that of a merely Christian life.

Your own peculiar sorrows at this time, Mr. President, give more than ordinary point to my thoughts. With your young and beautiful son, poising perhaps between life and death, perhaps in God's all-wise providence soon to make the change appointed to all men, we are peculiarly urged to think of the sad office belonging to our profession; for in sadness and sorrow we commit how many — "dust to dust, ashes to ashes" — a glorious planting in the garden of graves. How gladly, Sir, do we sow, in hope of the joyful resurrection, when "the mortal must put on immortality, and the corruptible must put on in corruption." May the blessings of pure and undefiled religion crown the toils that belong to earth; and all that men do under the good providence of God, be done to the glory of his name. I thank you, Sir, for remembering the Clergy of the land, and yield my place to others who may address us on this pleasant and interesting occasion.

The President then announced the following Song: —

THE HARVEST HOME.

(Written for the Agricultural Celebration at Dedham, Sept. 28, 1853.)

BY MRS. JANE E. LOCKE.

The sheaves are bound, the gleaning o'er,
We to the gathering come;
Where CERES brings her golden store,
To sing the "HARVEST HOME;"

POMONA crowns the joyful feast,
And heaps the banquet high,
With luscious fruit that charms the taste,
Yet keeps the goblet dry.

We dedicate an altar here
To ISIS, as of old,
And burthen'd sheaf and ripened ear,
Are offerings that we hold.
The firstlings of the flock and herd,
The tributes of our pride;
And bridled bullock on the sward,
Turning the furrow wide.

Proud matrons come with broidered fold,
And web of colors rare;
And choicer treasures, new and old,
To make the guerdon fair.
Thus we, the yeomen of the land,
To deck the altar come,
With earnest heart and mighty hand,
And sing the "HARVEST HOME."

Then pour the full libation now,
Of water, not of wine;
For CERES spurned the Bacchic vow,
Nor pressed the purple vine.
The garden's fruits and garner's store,
Her temple best become;
Then let us crown her here once more,
And sing the "HARVEST HOME."

The next toast given was complimentary to the Hon. Josiah Quincy, senior —

Mr. Quincy addressed the meeting in a practical and instructive speech.

The President next introduced the Hon. J. H. W. Page, President of the Bristol County Agricultural Society, as a zealous and stanch friend of Agriculture, and who was present as a Delegate from the Massachusetts Board of Agriculture.

Col. Page responded in an appropriate and excellent speech, but of which, with others, our reporter omitted to furnish a copy.

A sentiment was then given in honor of Agricultural Associations.

The Chair called on Hon. Seth Sprague, President of the Plymouth County Society.

Mr. Sprague replied in a brief speech, marked with that practical good sense for which he is distinguished.

The Agricultural Press was then toasted, and for which Wm. S. King, Esq., Editor of the *Journal of Agriculture*, responded.

Mr. Wilder introduced Mr. King as *now* a citizen of Norfolk County, congratulating the Society on the circumstance, and greeting him with a cordial welcome.

MR. KING'S SPEECH.

Mr. President, I thank you very sincerely for my welcome to your County as a resident, and to your Society as a member. It is a matter of little interest to any but myself, Sir, that having determined to remove my household gods from the sister State of Rhode Island into this Commonwealth, I was led to select Norfolk County for a residence, because of having attended her several annual shows, and witnessed the unsurpassed spirit and energy of her sons; nevertheless, I state it as a mere fact.

Permit me now, Sir, to go back to the day of your first Exhibition, and to narrate the rise and progress of the NORFOLK AGRICULTURAL SOCIETY, as seen by a stranger, and it will be conceded, I think, Sir, that this Society has claims not only upon the admiration of the people of this country for its unequalled success, but upon their gratitude for the great results which have been the legitimate consequences of that success.

All present probably remember — indeed, who that was privileged to witness it can forget? — the first Exhibition of your Society. Where before, at any similar Show, had been seen such a gathering of the great and the wise — the agriculturists and horticulturists — the statesmen and scholars of the Commonwealth? Threading his way among the dense crowd of spectators, the stranger saw, most active among the busy, men whose names he had been taught to honor, and whose labors he had learned to bless: there were WILDER, and WALKER, and WELD, and FRENCH, and DOWNER, and a score of others, who had taught New England soil to rival in productiveness the most famed spots of earth; there was QUINCY, the honored sire, and the honored son, WINTHROP, fit inheritor of a noble name; ADAMS, whose grandsire (God keep his memory green!) was the ablest champion of the Declaration of Independence, and whose father lived to be the most doughty defender of the sacred right of Petition; EVERETT — a name dear to the American people — the scholar, the

statesman, and the gentleman; and here too, Sir, at home among the farmers, a deeply interested observer of all that was done and all that was shown, stood one who towered above the intellects of the age, as Saul among the people — one whose fame, centuries hence, will loom up on the page of American history, like the great Pyramid of Cheops upon the plains of Egypt — sublime and awful! — here was WEBSTER, the Farmer of Marshfield. But alas! he is with us — he is with the living — no more. Amid the scenes endeared to him by the sweetest associations, among sleeping children and kindred, the aged patriot rests, and the surges of the sounding sea sing his requiem. And here were hundreds, thousands of the men and women of Norfolk, inspired by a noble zeal in a noble cause.

Your Society knew no infancy. Like Adam, it came forth created of the full size and stature of a man. Men saw it as the river, but never as the brook; they saw it as the oak, but never as the acorn.

Your next annual meeting, Sir, was another mighty gathering. The timid and the envious had prophesied exhaustion from the first effort; "the wish was father to the thought" in many cases, and they foreboded a failure. There were false prophets in those days, Sir. The second show was, in all essentials, a great improvement upon its predecessor; and the Norfolk Society was no longer, even by the most hesitating, called an experiment; it was a "fixed fact."

Among your guests on the occasion of your second anniversary, was one of the oldest laborers in the field of agricultural literature, JOHN S. SKINNER, of Baltimore. In 1819, he commenced the publication of the *American Farmer*, — the first agricultural paper published in America; — and on the 2d of April, before he had secured a single subscriber, appeared the first number. The subscription price was $4 per annum. He conducted this journal for several years, with profit to himself and to his country, and afterwards sold it for $20,000. He afterwards established the *Turf Register*, which was also successful. He then became editor of the *Farmer's Library and Agricultural Journal*, published by Greeley and McElrath, of New York; and finally started and edited *The Plough, the Loom, and the Anvil*. He also held various honorable offices under the general government: having been appointed a Purser in the Navy, by his friend, President Madison, and afterwards Postmaster of Baltimore. This position he held under changing administrations for a period of twenty-two years. He was also appointed Assistant Postmaster General by General Harrison.

Mr. President, he too has gone to his reward! He is beyond the reach of our praise or our sympathy; but I cannot believe the time and place unfitting for this passing mention of his name.

Men of mark have died among us and about us, Sir, but the young have stepped forward to fill the gap left by the departure of their elders; you and others have been spared to us, and the Society has continued up to this day to flourish.

But, Mr. President, the spirit that called into existence the Norfolk Society, and conducted it in its career, was not lulled to slumber by success. The same spirit, the same men originated the MASSACHUSETTS BOARD OF AGRICULTURE, so ably represented here to-day by its Secretary. This organization,

that is doing so much of good, and from which so much is anticipated, is a legitimate child of the Norfolk Society. Nor does the race end in the second generation. From this promising daughter of Norfolk, has already been raised up offspring — THE UNITED STATES AGRICULTURAL SOCIETY — thus, the grandchild of precocious Norfolk, herself but four years old! And at the first meeting of the National Society, an honored son of Norfolk — Marshall P. Wilder — was by acclamation, as well as by more formal ballot, created its President.

Of the noble field of duty which lies before the United States Agricultural Society, and of the fair promises of triumphant success, I will not now speak; rather let me make return to you, in so far as I can, for your complimentary toast, by offering the following sentiment: —

THE NORFOLK AGRICULTURAL SOCIETY. — Its history goes to prove that "Rome" *might have been* "built in a day."

The following sentiment was received from Hon. Amasa Walker, ex-Secretary of the Massachusetts Board of Agriculture: —

THE NORFOLK AGRICULTURAL SOCIETY. — If, when only a child of five years, it is one of the most brilliant and efficient societies in the Commonwealth, what may we not expect from the maturity of its manhood?

Appropriate remarks and sentiments were also offered by Col. Thomas Adams; Rev. C. C. Sewall, of Medfield; Rev. Ralph Saager, of Dover; Rev. J. M. Merrick, of Walpole — and others.

The proceedings were then closed by singing the following

ODE.

BY REV. JAMES RICHARDSON, JR.

TUNE — "*Auld Lang Syne.*"

In days of old, in Paradise,
Mankind, a blissful pair,
'Mid blooming bowers the garden tilled,
God made their earliest care.

CHORUS. — Oh! for the garden of Lang Syne,
The dear old Paradise!
We'll toil in hope, till once again
It greets our joyful eyes.

There lovely Eve trained sweetest flowers,
While Adam "dressed the soil,"
Till that forbidden apple drove
Them forth to harsher toil.

CHORUS. — Oh! for the garden of Lang Syne,
From whence we thus were driven: —
Our Eves must *help* our Adams strive,
Till we *regain* its heaven.

For this the broad luxuriant earth
Was given to our care: —
That magic Culture might create
A garden *everywhere*.

CHORUS. — Oh! for the gardens rich and fair,
The Paradise to come!
When choicest fruits and sweetest flowers
Shall bless each happy home.

For never shall a glad content
Illume with joy our eyes,
Till Plenty, crowned with Beauty, change
This world to Paradise.

CHORUS. — Then till this garden of the Lord,
And weave your Eden bowers;
Till earth rejoice with bounteous fruits,
And smile 'mid wreathing flowers.

And as this *outward* Paradise
Its glories round us roll,
The *inward* reign of peace and love
Shall bless each human soul.

CHORUS. — Oh! for the Eden soon to come, —
Of harmony and love,
That shall, at length, this earth unite
With radiant spheres above.

And to this grand and heavenly cause,
We'll consecrate these walls,
Long, long may Culture's voice resound
Its music through these halls.

CHORUS. — And as her triumphs here we sing,
With gladsome heart and voice,
Oh! in her power may we go forth,
To make the WORLD rejoice.

Thus ended the FIFTH ANNIVERSARY, of which one of the papers of the day remarks: —

"Since the origin of the Norfolk County Society, its members never have held any Exhibition under more favorable circumstances as to display, or more unfavorable in respect to weather. But bad as the weather was, it could not damp the zeal of a majority of the members — ladies as well as gentlemen — nor of their friends, a large number of whom were present yesterday. Had the weather been fine, we do not see what could have been done with the multitude which would have undoubtedly been present. It could only be the most enthusiastic zeal that could induce people to risk such soakings as they had yesterday. And this decided evidence of appreciation, we hope, will tend to the retention and prosecution, by the officers and trustees of the Society, of that enthusiastic and patriotic feeling and practice which has raised their Society so high in the ranks of public benefactions."

LIST OF PREMIUMS, GRATUITIES AND DIPLOMAS,

AWARDED BY THE

NORFOLK AGRICULTURAL SOCIETY

FOR THE YEAR 1853.

FARMS.

B. V. French, 1st premium, $25

PLOUGHING.

DOUBLE TEAMS.

Samuel J. Capen, Dorchester, 1st premium, $10
H. & M. Whiting, Dedham, 2d " 8
Aaron D. Weld, West Roxbury, 3d " 6
J. Willard Daniels, Medway, 4th " 4

SINGLE TEAMS.

Henry Goulding, Dover, 1st premium, $8
Timothy Tucker, Milton, 2d " 7
Aaron D. Weld, W. Roxbury, 3d " 6
L. & J. E. Eaton, Dedham, 4th " 5
Benj. N. Sawin, Dover, 5th " 4
Hollis Mann, Dover, 6th " 3
Benj. V. French, Braintree, 7th " 2
Daniel Pierce, Milton, gratuity, 2

HORSE TEAMS.

Isaac H. Meserve, W. Roxbury, 1st premium, $8
Patrick Wall, Dover, 2d " 6
Hiram W. Jones, Dover, 3d " 4
Benj. V. French, Braintree, 4th " 2

SPADING.

Peter Ford, Wrentham, 1st premium, $8
David Scanlan, Dedham, 2d " 7
William Hickey, Dorchester, 3d " 6
Patrick Donahoe, Dedham, 4th " 5
Thomas Flinn, Dorchester, 5th " 4
Timothy Hickey, Dorchester, 6th " 3
Denis Doody, Dorchester, 7th " 2
John Gorry, Dorchester, 8th " 1

FAT CATTLE.

Luther Spear, Dorchester, 2d premium, $5

BULLS.

DEVON.

Aaron D. Weld, W. Roxbury, 1st premium, $5
John S. Eldridge, Canton, 2d " 3

AYRSHIRE.

Lemuel Billings, Quincy, 1st premium, $5

ALDERNEY.

Lyman Kinsley, Canton, 1st premium, $5

COWS.

JERSEY.

John J. Dixwell, W. Roxbury, 1st premium, $5
Lyman Kinsley, Canton, 2d, " 3
S. R. Spaulding, W. Roxbury, gratuity, 2

AYRSHIRE.

Samuel J. Capen, Dorchester, 2d premium, $3

DURHAM.

Lemuel Billings, Quincy, 1st premium, $5
Samuel J. Capen, Dorchester, 2d " 3
Wm. T. G. Morton, Needham, gratuity, 2

GRADE.

Samuel J. Capen, Dorchester, 1st premium, $5
Wm. T. G. Morton, Needham, 2d " 3
Aaron D. Weld, W. Roxbury, gratuity, 3
Marshall P. Wilder, Dorchester, " 2

NATIVE.

Francis Guild, Dedham, 1st premium, $5
Joseph W. Clark, Dedham, 2d " 3
Marshall P. Wilder, Dorchester, gratuity, 2

MILCH.

Samuel J. Capen, Dorchester, 1st premium, $10
Francis Guild, Dedham, 2d " 8
J. J. Dixwell, W. Roxbury, 3d " 6
Joseph W. Clark, Dedham, 4th " 4

PRODUCE OF MILK.

John H. Robinson, Dorchester, 1st premium, $10

HEIFERS.

AYRSHIRE.

Samuel J. Capen, Dorchester, 1st premium, $3

DEVON.

John S. Eldridge, Canton, 1st premium, $3
John S. Eldridge, Canton, 2d " 2

DURHAM.

James Dorr, Dorchester, 1st premium, $3

ALDERNEY.

J. J. Dixwell, W. Roxbury, gratuity, $2

GRADE.

Solomon Flagg, Needham, 1st premium, $3
David Chase, Dedham, 2d " 2
Jos. Fisher & Son, Dedham, gratuity, 2
John Fussell, Roxbury, " 2

NATIVE.

Alfred R. Ellis, Walpole, 1st premium, $3
Israel Hunting, Needham, 2d " 2

UNDER ONE YEAR OLD.

John R. Dow, Milton, 1st premium, $3
William Pierce, Needham, 2d " 2
Joseph Fisher & Son, Dedham, 3d " 1
Aaron D. Weld, W. Roxbury, gratuity, 2
Edward R. Pope, Quincy, " 1
Seth Blake, Dover, " 1
Benj. H. Tubbs, Dedham, " 1

IN MILK.

Aaron D Weld, W. Roxbury, 1st premium, $6
Samuel J. Capen, Dorchester, 2d " 5
Aaron D. Weld, W. Roxbury, 3d " 4

WORKEN OXEN.

Timothy Tucker, Milton, 1st premium, $8
Aaron D. Weld, W. Roxbury, 2d " 6
Benj. V. French, Braintree, 3d " 5

STEERS.

Enslin & Avers, W. Roxbury, 1st premium, $5
J. Willard Daniels, Medway, gratuity, 2

HORSES.

SINGLE CARRIAGE.

Henry S. Clarke, Walpole, 1st premium, $3

STALLIONS.

Albert R. Mathes, Roxbury, 1st premium, $10

COLTS.

Jos. H Billings, W. Roxbury, 3 years old, $5
S. S. Whitney, Dedham, 2 years old, 3
Benj. W. Balch, Dedham, yearling, 2
Jos. H. Billings, W. Roxbury, gratuity, 2

BREEDING MARES.

Samuel Cook, Milton, 1st premium, $7
Benjamin Neal, Walpole, 2d " 5
Joseph H. Billings, W. Roxbury, gratuity, 2
John J. Carr, Quincy, " 3

FARM HORSES.

Benj. V. French, Braintree, 1st premium, $6
Elijah Tucker, Milton, gratuity, 5

SWINE.

BOARS.

Wm. T. G. Morton, Needham, 1st premium, $6
Richard Richardson, Medway, 2d " 5
H. L. Howe, Needham, 3d " 4

BREEDING SOWS.

H. L. Stone, Needham, 2d premium, $5
Abner Alden, Dedham, 3d " 4
Marshall P. Wilder, Dorchester, gratuity, 2
Aaron D. Weld, W. Roxbury, " 2

WEANED PIGS.

Town Farm, Needham, 1st premium, $5
Henry Goulding, Dover, 2d " 3
Henry Wood, Needham, 3d " 2

FAT HOGS.

William Flagg, Needham, 1st premium, $6
Charles C. Sewall, Medfield, 2d " 5

FOWLS.

Nathaniel Dunbar, Canton, White Shanghaes, $2
Charles Sampson, W. Roxbury, Gray " 2
J. A. C. Butters, W. Roxbury, Black " 2
Ellphalet Stone, Dedham, Bolton Grays, 2
James Calder, Dedham, Black Spanish, 2
Chas. L. Copeland, Milton, Marsh Shanghaes, $2
Daniel McDaniel, Dorchester, Buff " 2
George F. Richards, Dedham, Bantams, 2
James S. Drayton, Dedham, Brahma Pootras, 2
Humphrey Smith, W. Roxbury, Chittagongs, 2

DUCKS.

Wm. T. G. Morton, Needham, 1st premium, $2

GEESE.

William S. Damrell, Dedham, 1st premium, $3
Wm. T. G. Morton, Needham, gratuity, 2

TURKEYS.

Lemuel Kingsbury, Needham, 1st premium, $3
E. Bird, Stoughton, 2d " 2

BEST LOT OF FOWLS.

Wm. T. G. Morton, Needham, 1st premium, $4
Charles L. Copeland, Milton, 2d " 3
E. Bird, Stoughton, 3d " 2

BUTTER.

Chas. C. Sewall, Medfield, best 40 lbs., $20
Chas. C. Sewall, Medfield, best 20 lbs., 10
George Crosby, Medway, box 12 lbs., 6
James P. Clark, Medway, 2d, 4
——— ———, ———, 3d, 2

CHEESE.

James P. Clark, Medway, 2d premium, $3

BREAD.

WHEAT.

Miss Mary F. Hollis, Braintree, 1st premium, $3
Mrs. J. D. Howe, Dedham, 2d " 2

WHEAT AND INDIAN.

Sarah Davenport, Milton, 2d premium, $2

RYE AND INDIAN.

Mrs. P. Ruggles, Milton, 1st premium, $3
Miss Amelia Hunt, Medway, 2d " 2

FRUIT.

APPLES.

Benj. V. French, Braintree, 1st premium, $5
William Clapp, Dorchester, 2d " 3
L. Whiting Babcock, Milton, 3d " 2
David A. Baker, Dedham, best dish, 2

PEARS.

Marshall P. Wilder, Dorchester, 1st premium, $5
Samuel Downer, Jr., Dorchester, 2d " 3
Samuel Walker, Roxbury, 3d " 2
Lewis Wheeler, Cambridge, gratuity, 1

PEACHES.

Henry Goulding, Dover, 2d premium, $3
L. Whiting Babcock, Milton, 3d " 2
A. F. Sherman, best dish, 2

FOREIGN GRAPES.

Charles Sampson, W. Roxbury, 1st premium, $5
Jeremiah Prichard, W. Roxbury, 2d " 3
Charles B. Shaw, Dedham, gratuity, 1

NATIVE GRAPES.

Mrs. Diana Crehore, Milton, 1st premium, $3
Mrs. Rebecca Alden, Dedham, gratuity, 1

ASSORTED FRUITS.

Edward M. Richards, Dedham, gratuity, $2
Francis Marsh, Dedham, Tomato Figs, gratuity, 1

FRUIT TREES.

APPLE ORCHARD.

Artemas Aldrich, Wrentham, 1st premium, $15

FLOWERS.

Lewis Davenport, Milton, $3
James Richardson, Jr., Dedham, 2
Miss Mary R. Richards, Dedham, 2
Miss Hannah Chickering, Dedham, 1
Miss Delia White, Dedham, 1
Mrs. Ellis Bacon, Walpole, 1
Mrs. Smith, Needham, 1
Mrs. Mackintosh, Needham, 1
Mrs. Mary Carleton, Dorchester, 1
Miss Mary Emerson, Dedham, 1

VEGETABLES.

BEST COLLECTION.

Charles L. Copeland, Milton, 1st premium, $10
Benj. V. French, Braintree, 2d " 5

POTATOES.

Charles C. Sewall, Medfield, 1st premium, $5
Joseph Harper, W. Roxbury, gratuity, 2
Chas. A. Hewins, W. Roxbury, " 1

MELONS.

Ebenezer Adams, Quincy, gratuity, $2
L. & J. E. Eaton, Dedham, " 1

GRAIN CROPS.

INDIAN CORN.

Luther Gilbert, Needham, 1st premium, $8
Benj. N. Sawin, Dover, 2d " 5
John R. Dow, Milton, 3d " 3
Isaac H. Meserve, W. Roxbury, gratuity, 3
Philemon Ruggles, Milton, " 2
Robert Mansfield, Needham, "

WHEAT.

Horatio Mason, Medway, 1st premium, $6
Patrick McManus, Sharon, gratuity, 3

RYE.

Benj. F. Dudley, Milton, 1st premium, $4

BARLEY.

Horatio Mason, Medway, 1st premium, $4

WHITE BEANS.

Benj. N. Sawin, Dover, 1st premium, $6

AGRICULTURAL IMPLEMENTS.

Henry Partridge, Jr., Medfield, 1st premium, $15

MANUFACTURED IN THE COUNTY.

Henry Partridge, Jr., Medfield, 1st premium, $6

DOMESTIC MANUFACTURES.

Mrs. Deborah F. Briggs, Foxboro', Quilt, $2.00
Miss Olive Cheney, Dover, " 1.00
J. W. Bronson, Milton, Rug, .50
John Bestwick, Dedham, Hose, 1.00
Miss Eliza Niles, Dedham, " 1.00
Mrs. Sarah Mansfield, Hose, .50
Mrs. Jos. Abbey, Medway, " .50
Mrs. Alfred Allwright, Dedham, Lace Work, 1.00
Mrs. Frederic A. Taft, Dedham, " 1.00
Edwin W. Colburn, Dedham, Worsted Work, 2.00
Mrs. Theresa Warth, Dedham, Needlework, .50
Miss Annie B. Nichols, Medway, Ottoman, 1.00
S. A. Crawshaw, Roxbury, Crochet Work, .50
Miss Olive C. Guild, Dedham, Paintings, 1.00
Metcalf & Daniels, Medway, Straw, 6.00
L. G. Baker, Dedham, " 2.00
Tuck & Hodges, Stoughton, Yarn, 1.00
Tuck & Hodges, Stoughton, Hose, 1.00
Timothy Phelps, Dedham, Hats, 1.00
Lemuel Kingsbury, Needham, Glue, 1.00
James Daniels, Medway, Whipstocks, 1.00
William G. Woods, Dedham, Fretwork, .50
Holbrook & Thayer, Bellingham, Boots, 2.00
James Pitcher, Canton, " 3.00
Wm. C. Daniel, Braintree, Boot Fitting, 1.00
Dicker & Cotton, Stoughton, Leather, 1.00
Cushman & Baker, Medfield, Wagon, 5.00

ESSAY.

Rev. John M. Merrick, Walpole, $10

DIPLOMAS.

Peter Ford, Wrentham, Spading.
Albert Southworth, Stoughton, Bulls.
S. Palmer, Milton, Bull.
Jesse Farrington, Dedham, Bull.
Payne & Mathes, Roxbury, Stallion.
Samuel S. Whitney, Dedham, Mare.
John Fussell, Roxbury, "
John Fussell, Roxbury, Boar.
George Houghton, Dorchester, Boar.
H. L. Stone, Needham, "
Samuel J. Capen, Dorchester, "
Joseph Mann, Jr., Dorchester, "
Wm. T. G. Morton, Needham, Sow.
Joseph Robinson, Dorchester, Pigs.
Mrs. Lydia A. Swett, Roxbury, Rug.
Miss Olive C. Guild, Dedham, Designs.
George W. McElroy, Dorchester, Worsted Work.
Mrs. John G. Jones, Foxboro', Wax Fruit.
Boston Carpet Co., Roxbury, Carpets.
Charles B. Crossman, Dedham, Drills.

Norfolk Agricultural Society.

LIST OF PREMIUMS FOR THE YEAR 1854.

PROGRESSIVE HUSBANDRY.

For the best conducted and most improved Farm during five consecutive years, commencing in the year 1850 — of which the occupant shall present annually to the Trustees a satisfactory account of the whole management of the Farm — of the crops produced, of the improvement made, and the cost of the same — of the stock kept and the capital employed — a premium of *One Hundred Dollars*, to be paid in 1855.

NOTE. Whenever any Farm shall be entered for this premium, the Secretary of the Society shall give notice thereof to the Trustees in the Town in which such Farm is situated; and the said Trustees, in conjunction with the Committee on Farms, will be required to examine the Farm from time to time, and to certify the general management of it, and the mode of keeping the cattle, particularly in regard to their comfort and cleanliness.

MANAGEMENT OF FARMS.

For the most valuable and economical improvements in the cultivation and management of Farms *entire*, during the year, including lands, crop, stock, and all other appendages,

First premium,	$25.00	Third premium,	$12.00
Second "	15.00	Fourth "	8.00

Competitors for these premiums must give notice of their intention to the Secretary, on or before June 15. Farms offered for inspection will be viewed by the Committee from the 20th June to 10th

July, and also in September. Any extraordinary field crop will, on notice, be visited by the Committee, and a report of the same be made to the Society.

IMPROVING MEADOW AND SWAMP LANDS.

For the best conducted experiment in reclaiming wet meadow or swamp lands, by drainage or otherwise, on not less than one acre, with a statement, in detail, of the course of management and the produce, &c.,

First premium,	$15.00	Second premium,	$10.00

OLD PASTURE LANDS.

For the best conducted experiment in restoring and improving old pasture lands, with an account of the means employed and the expense of the same,

First premium,	$8.00	Second premium,	$6.00

For the best written report given by any member of the Society, and worthy of publication, of any improvement observed in any meadow, or swamp, or old pasture lands, in the County,— other than those lands for which the above mentioned premiums may be claimed,

A premium of $10.00.

CLEARING AND ENCLOSING UNIMPROVED LANDS.

For the best conducted experiment of clearing unimproved lands, on not less than one acre; conditions and specifications the same as in meadow and swamp lands,

First premium,	$15.00	Second premium,	$10.00

PLOUGHING.

Double Teams. For the best performance in ploughing, at least one-eighth of an acre — within one hour — not less than seven inches in depth,

First premium,	$10.00	Third premium,	$6.00
Second "	8.00	Fourth "	4.00

SINGLE TEAMS. For the best performance in ploughing, at least one-eighth of an acre, not less than six inches deep,

First premium,	$8.00	Fifth premium,	$4.00
Second "	7.00	Sixth "	3.00
Third "	6.00	Seventh "	2.00
Fourth "	5.00		

HORSE TEAMS. For the best performance in ploughing with horses,

First premium,	$8.00	Third premium,	$4.00
Second "	6.00	Fourth "	2.00

NOTE. A *Double Team* will consist of two yokes of oxen, with or without a driver; or a team of one yoke of oxen and a horse also, with or without a driver. *Single Team*, one yoke of oxen without a driver. Competitors must own their teams and ploughs, and enter the same in their own names. Notice to compete must be given to the Secretary on or before the Saturday previous to the Exhibition. In awarding premiums, one hour will be allowed for the performance of the work, regard being had to the width and the depth of the furrow-slice, and the evenness, ease and quiet with which the work is performed.

EXPERIMENTS IN SUBSOIL PLOUGHING.

For the most satisfactory experiment, on not less than one acre of land, of the effect of subsoil ploughing, to be determined by the difference in the value of the crops, raised on equal portions of equally manured land, of equal quality, one-half of which having been subsoil ploughed, the other half ploughed in the usual manner,— statements of the depth of ploughing, in each instance, together with all the particulars of culture required,

First premium,	$10.00	Second premium,	$7.00

SPADING.

For the best performance in spading, not less than ten inches in depth, on a piece of not less than one hundred square feet of sward land; due regard being had to time, the thoroughness of the pulverization of the soil, and the state in which it is left for the reception of seed — the labor to be performed with a common square spade,

First premium, $8, and diploma; second do., $7; third do., $6; fourth do., $5; fifth do., $4; sixth do., $3; seventh do., $2; eighth do., $1.

EXPERIMENTS ON MANURES.

For an exact and satisfactory experiment in the preparation and application of manures, either animal, vegetable or mineral, due regard being had to economy, a premium of $15.00

For an exact and satisfactory experiment in the application *alone* of manures, in the best manner, and with the greatest economy,

First premium, $10.00 | Second premium, $5.00

TURNING IN CROPS AS A MANURE.

For the most satisfactory experiment of turning in crops as a manure, either *green* or *dry*, on not less than *one-half acre of land*, a detailed account of the whole process to be given in writing,

First premium, $8.00 | Second premium, $6.00

COMPARATIVE VALUE OF CROPS AS FOOD FOR CATTLE.

For the most satisfactory experiment upon a stock of cattle, not less than four in number, in ascertaining the relative value of the different kinds of fodder used, with a statement in detail of the quantity and value of the same, as compared with English hay, the experiment to be made in the three winter months,

First premium, $15.00 | Second premium, $10.00

FATTENING CATTLE.

For the most satisfactory experiment in *feeding* cattle, with a statement in detail of the process and the result,

First premium, $10.00 | Second premium, $5.00

FATTENING SWINE.

For the most satisfactory experiment in *feeding* swine, with a statement in detail of the process and the result,

First premium, $8.00 | Second premium, $5.00

SOILING OF CATTLE.

For the most satisfactory experiment of the *soiling* of cattle, with a detailed statement of the process and the result — regard being

had to the *saving of manure*, and to the comparative *expense of pasturing*,

First premium, $15.00 | Second premium, $10.00

GREEN FODDER.

For the best conducted experiment in raising corn fodder or other succulent feed to be used green,— on not less than *one-half acre* of land,— with a statement, in detail, of the mode and cost of cultivation, a premium of $7.00

HAY.

For the largest quantity and best quality of English Hay per acre, not less than two acres, produced on any farm in the County, regard being had to the mode and cost of cultivation, a premium of $6.00

CULTIVATION OF GRAIN CROPS.

1. For the best conducted experiment in *Wheat*, on not less than *one-half* acre of land, first premium, $6; second do., $4.

2. For the best conducted experiment in *Rye*, on not less than *one* acre of land, first premium, $4; second do., $2.

3. For the best conducted experiment in *Oats*, on not less than *one* acre of land, first premium, $4; second do., $2.

4. For the best conducted experiment in *Barley*, on not less than *one* acre of land, first premium, $4; second do., $2.

5. For the best conducted experiment in *Indian Corn*, on not less than *one* acre of land, first premium, $8; second do., $5; third do., $3.

6. For the best conducted experiment in raising *White Beans*, on not less than *one-half* acre of land, a premium of $6.

Claimants for premiums on Grain Crops are required to notify the Chairman of the Committee on Grain Crops on or before the 15th of November, by a written statement, containing the following particulars: — a description of the soil; the value of the land; the interest on that value; the amount of taxes; the value of manure, or ashes, or plaster used; the cost of seed; the expense of preparing the

ground, of sowing or planting; of cultivating and harvesting the crop, and the total value of the crop raised; that by a single glance the net profit of the production may be seen.

Note. Applications for premiums on Small Grains to be made on or before the first of July, and on Indian Corn on or before the fifteenth of August; not less than a half bushel of each kind to be shown at the annual exhibition. The quantity to be ascertained by weight, as follows: — Corn, 56 lbs. to the bushel; Rye, 56; Barley, 46; Buckwheat, 46; Oats, 30; Wheat, 60.

MIXED CROPS.

For the best conducted experiment in the cultivation of mixed crops of grains and vegetables, in alternate rows — first premium, $6; second premium, $4. This must be made on not less than one acre of land, and a statement in detail of the expense and product will be required.

ROOT CULTURE.

1. For the best conducted experiment in raising *Potatoes*, a premium of $6.00

2. For the best conducted experiment in raising *Sugar Beets*, a premium of $8.00

3. For the best conducted experiment in raising *Carrots*, a premium of $8.00

4. For the best conducted experiment in raising *Parsnips*, a premium of $8.00

5. For the best conducted experiment in raising *Ruta Baga*, a premium of $8.00

6. For the best conducted experiment in raising *Mangel Wurtzel*, a premium of $8.00

7. For the best conducted experiment in raising *Flat Turnips*, a premium of $5.00

8. For the best conducted experiment in raising *Onions*, first premium, $5; second do., $4.

Samples of one bushel to be presented at the annual exhibition.

These crops must be raised on not less than *one-half* acre of land, except *Parsnips*, which may be on *one-quarter* of an acre, and the quantity ascertained by weight, as follows: — Carrots, 55 lbs.;

Sugar Beets, 60 ; Mangel Wurtzel, 60 ; Ruta Baga, 60; Parsnips, 45 ; Round Turnips, 50.

Note. Application for premiums on Root Crops to be made on or before the 10th of Sept. It shall be the duty of the several Committees on these experiments, to take into consideration the character of the soil on which the crops have been raised, the capital employed, the whole management and cost of the experiment, and to award the premiums with particular regard to the general merits of the applicant, who shall be required to make a detailed statement on or before the 20th of November.

VEGETABLES.

Autumn and Winter Squashes. For the best conducted experiment on raising the *Autumnal Marrow* and *Winter Crookneck Squash*, on not less than *one-fourth* of an acre of land, at least one dozen to be exhibited at the Exhibition, a premium of $5.00.

Cabbages. For the best conducted experiment in raising *Cabbages*, on not less than *one-half* acre of ground, a premium of $5.00

For the best collection and variety of Garden Vegetables, regard being had to the quantity as well as quality exhibited — first premium, a Silver Cup of the value of $10 ; second do., $5 ; third do., $4 ; fourth do., $3 ; fifth do., $2 ; sixth do., $1.

Potatoes. For the best new variety of *Seedling* Potatoes, superior to any kind now in cultivation, a premium of $20.00

For the best collection of Potatoes, not less than a *peck* of each variety, a premium of $5.00

KITCHEN GARDEN.

For the best kitchen garden, on not less than one quarter of a acre of ground — regard being had to the quantity, variety and excellence of the vegetables therein, and the mode and expense of cultivation — a premium of $5.00

ANIMALS.

To be entered in the names of their proper Owners, who must have had them six months before Exhibition.

Note. In all cases where it is found that animals entitled to the first premium, have before received the same at any former exhibition of the Society, a Diploma, certifying that said animal is the best, shall be awarded instead of the premium.

The Diploma of the Society shall be awarded at the discretion of the several Committees, for animals exhibited from without the limits of the County.

Fat Cattle. For the best *beef animal*, fattened within the County, regard being had to the manner of feeding, and the expense thereof — first premium, $8; second do., $5; third do., $3.

Bulls. For the best *Bull*, not less than *one year old*, on satisfactory evidence being given that he shall be kept for use in the County for nine months from the day of exhibition — Jersey, first premium, $5; second do., $3. Ayrshire, first premium, $5; second do., $3. Durham, first premium, $5; second do., $3. Devon, first premium, $5; second do., $3.

For the best Bull Calf of any of the above classes, under one year old — first premium, $3; second do., $2; third do., $1.

Cows. For Cows not less than three years old — Jersey, first premium, $5; second do., $3. Ayrshire, first premium, $5; second do., $3. Durham, first premium, $5; second do., $3. Devon, first premium, $5; second do., $3. Grade, first premium, $5; second do., $3. Native, first premium, $5; second do., $3.

Heifers. For Heifers from one to three years old—Jersey, first premium, $3; second do., $2. Ayrshire, first premium, $3; second do., $2. Durham, first premium, $3; second do., $2. Devon, first premium, $3; second do., $2. Grade, first premium, $3; second do., $2. Native, first premium, $3; second do., $2.

Best Heifer under one year old—first premium, $3; second do., $2; third do., $1.

Milch Cows. For the best Milch Cow, not less than three years old, with satisfactory evidence of the quantity and quality of her milk, and the manner in which she has been fed, certificates of which must be filed in writing, of the product of her milk and butter made from the cow during two periods of ten days each. Three months, neither more nor less, shall elapse between the two periods of trial aforesaid, and the last trial shall be completed before the date of the Annual Exhibition. In cases where the milk is not made into butter, the quantity and weight of the milk must be stated, time of the cow's calving, and quality of the calf. Verbal statements cannot be depended upon or received. First premium, $10; second do., $8; third do., $6; fourth do., $4.

Produce of Milk for the entire year. For the best con-

ducted experiment with a stock of Milch Cows, not less than ten in number, and yielding, each cow, not less, on an average, than eight quarts per day, for a period of one year,—with a statement, in detail, of the character, age, and breed of the cows, and of the method and expense of feeding them, a premium of $25.00.

For a similar experiment, with a stock of not less than six cows, and with same conditions, a premium of $15.00.

For a similar experiment, with a stock of not less than four cows, and with same conditions, a premium of $10.00.

HEIFERS IN MILK. Not more than three years old—first premium, $6; second do., $5; third do., $4.

WORKING OXEN.

For the best pair of Working Oxen, not less than four years old, regard being had to their size, strength, docility, training and appearance. In testing their power, the load is not to exceed two tons — first premium, $8; second do., $6; third do., $5; fourth do., $3.

STEERS. For the best pair of three years old Steers, and under four, broken to yoke — first premium, $5; second do., $4; third do., $3.

TWO YEARS OLD AND UNDER THREE — first premium, $5; second do., $4.

ONE YEAR OLD AND UNDER TWO — first premium, $3; second do., $2.

TOWN TEAMS. For the largest and best team of Oxen from any town or city in the County — first premium, $20; second do., $15; third do., $10.

HORSES.

For the best pair of Matched Horses, a premium of $6.00

For the best Single Carriage Horse, a premium of 3.00

For the best STALLION, on satisfactory assurance that he shall be kept in the County at least *nine months* from the day of Exhibition, a premium of $10.00

COLTS. For the best four years old Colt, raised in the County, first premium, $6.00

For the best three years old Colt, raised in the County, first premium, $5.00

For the best two years old Colt, first premium, 3.00

For the best Yearling, first premium, 2.00

Breeding Mares. For the best Breeding Mare, with Foal by her side — first premium, $7; second do., $5.

Farm Horses. For the best Farm Horse, a premium of $6.00

SWINE.

For the best Boar, not less than six months old — first premium, $6; second do., $5; third do., $4.

For the best Breeding Sow, with or without Pigs — first premium, $6; second do., $5; third do., $4.

For the best litter of Weaned Pigs, not less than four in number, and from two to six months old, regard being had to their age — first premium, $5; second do., $3; third do., $2.

For the best fat Hog, with statement of the method of keeping — first premium, $6; second do., $5.

SHEEP.

For the best flock, not less than six in number — first premium, $5; second do., $3.

LIVE FOWLS.

For the best pair of Black Spanish, $2; do. do. Black Shanghaes, $2; do. do. White Shanghaes, $2; do. do. Marsh or Forbes Shanghaes, $2; do. do. Dorkings, $2; do. do. Poland, $2; do. do. Bolton Grays, $2; do. do. Barn-yard Fowls, $2; do. do. Fowls, $2; do. do. Guinea Fowls, $2; do. do. Bantams, $2; do. do. Ducks, $2.

For the best conducted experiment in raising, keeping and fattening any of the various breeds of fowls, with a statement, in detail, of the method, expense, and profit of the same, particularly of the amount of eggs produced from a given number of hens, in order to determine their laying properties, and also their condition in flesh and market value, — *no premium to be awarded without such statement*, — first premium, $6; second do., $4.

For the best lot of Geese, $3; do. Turkeys, $3; second best lot of Turkeys, $2.

For the best lot of Live Fowls, not less than twelve, $4; second best lot, not less than six, $3; third best lot, not less than six, $2.

No Fowls entered after nine o'clock shall be entitled to a premium.

DAIRY.

For the best produce of BUTTER, on any farm within the County, for four months, from the 20th of May to the 20th of September, a sample of not less than twenty pounds to be exhibited — *quantity* as well as *quality* to be taken into view, with a full account of the manner of *feeding* the Cows, and the general management of the milk and butter — first premium, $10; second do., $8; third do. $5; fourth do., $3.

NOTE. It will be seen that these premiums are offered for the best produce on the *Farms*, and not simply for the best specimens exhibited. Competitors will therefore be particular in keeping an account, and preparing a statement of the entire produce within the time mentioned. Each lot presented for premium must be numbered, but not marked; any public, or known mark, must be completely concealed, nor must the competitors be present at the examination.

For the best 40 lbs. of Butter, that drawing the premium to be placed upon the dinner table for consumption, a premium of $20.

For the best box of Butter, of not less quantity than 12 lbs. — first premium, $6; second do., $4; third do., $2.

NOTE. Butter to be presented on the morning of the second day.

CHEESE. For the best specimen of Cheese, of not less than 50 lbs. — first premium, $5; second do., $3; third do., $2.

BUTTER. For the best and most satisfactory statement at the Annual Exhibition in 1854, of the quantity produced from the milk of any number of Cows, not less than four nor more than seven, from January 1st, 1854, to the day of exhibition, in the fall, including a description of the character, age and breed of the Cows, and a particular account of the feeding and general management — first premium, $8; second do., $6.

For any number of Cows more than seven — first premium, $10; second do., $8.

BREAD.

For the best loaf of Wheat and Indian, of two to four lbs. weight — first premium, $3; second premium, $2.

For the best loaf made of Unbolted Wheat, which shall be grown in the County, of two to four pounds' weight — first premium, $3; second do., $2.

For the best loaf of Rye and Indian, of four to six lbs. weight — first premium, $3; second do., $2.

For the best loaf of Wheat Bread, of two to four lbs. weight — first premium, $3; second do., $2.

The bread presented for premium must be made on the day previous to the Exhibition, by some female member of a family, exclusive of hired persons, in whose name the entries shall be made, and to whom the premiums shall be awarded. The bread shall be baked in the oven commonly used by the family in which it shall be made. A written statement of the process of making the bread shall accompany each loaf.

There shall be Committees appointed to judge of the several descriptions of bread, to whom the names of the contributors shall not be known, and no person shall serve on said Committees if any member of his family shall be a competitor.

FOREST TREES.

For the best plantation of Forest Trees, of either of the following varieties, viz.: — White Oak, Yellow Oak, Locust, Birch, White Ash, or Walnut, Scotch Larch, Norway Spruce, Pitch Pine and White Pine, or other varieties, not less than three years old, and not less than one thousand trees, a premium, to be awarded in 1855, of $20.

For the best Plantation, to contain not less than five hundred trees, a premium of $10.

Ornamental Planting. To any city or town of Norfolk County, for the largest number and best growth of ornamental trees, which shall be planted in a public square or on the roadside — first premium, $30; second do., $20.

To any individual or Society, regard being had to the number of persons associated, for the largest number and best growth of ornamental trees, which shall be planted in a public square or on the roadside — first premium, $10; second do., $5.

These premiums to be awarded in the autumn of 1854, and if awarded to a city or town, to be graduated by the population according to the census of 1850.

FRUIT TREES.

Apple Orchard. For the best Apple Orchard, of not less than *seventy-five trees*, which shall have been set out since 1849, and which shall be in the best and most thriving condition in 1854 — first premium, $15; second do., $10; third do., $7.

Pear Trees. For the best engrafted or budded Pear Trees, set out since 1849, and which shall be in the most thriving condition in the autumn of 1854, not less than *twenty-five trees* — first premium, $10; second do., $5.

Renovation of old Apple Orchards. For the most satisfactory experiment in the renovation of *old Apple Orchards*, not less than *ten trees*, on any one farm, which, being re-claimed, shall in 1854 be in fine productive fruit — first premium, $10; second do., $6.

Peach Orchards. For the best Peach Orchard, of not less than *fifty trees*, set out since 1850, and which shall be in the most thrifty bearing condition in the autumn of 1854 — first premium, $10; second do., $5.

For the Peach Orchard, of not less than fifty trees, grown from pits planted since 1851, on the spot where the trees stand, which shall be in the best condition in 1855 — first premium, $10; second do., $5.

Seedling Apples or Pears. For the best variety of *new Seedling Apples or Pears*, of decidedly superior quality, *one dozen specimens* to be exhibited, together with a history of its origin, a description of its growth, and the bearing character of the tree — first premium, $10; second do., $5.

SEEDLING GRAPES.

For a new variety of *Native or Seedling Grape*, equal or superior to the Isabella, ripening, in this County, in the open air, by the *middle of September*, prolific and suitable for the table — first premium, $20; second do., $10.

CRANBERRY VINES.

For the most successful experiment in transplanting Cranberry Vines, or raising them from the seed, which shall be in the most flourishing and productive state on the first of September, 1854. Competitors will be required to give a particular account of their several operations.

First premium, $15.00 | Second premium, $10.00

HEDGES.

For the best *live Hedge Fence*, of not less than one thousand feet in length, premium to be awarded in 1854.

First premium, $10.00 | Second premium, $5.00

DOMESTIC MANUFACTURES.

FANCY ARTICLES, — including Needlework, Crotchetwork, Shellwork, Millinery, Drawings, Paintings, &c.

For such articles in this department as may be deemed worthy, a premium or gratuity, at the discretion of the Committee.

NOTE. It should be understood that, in this department of Ladies' work — while other things will receive due consideration — the premiums are intended *solely for newly made* articles which are really useful, or particularly beautiful For well made garments of any kind; for stocking knitting of wool, cotton, or silk; for bonnet and cap making; for all articles of children's wear, well made or tastefully embroidered; for neat and thorough mending, patching, and darning; for drawing, designing, or painting in oil or water colors; for models in plaster, wood, or marble, &c.

Children under 12 years of age, attending the public schools, are not invited to offer anything for premium, except such articles as will show their docility, diligence, and good behavior at school, and shall be accompanied with a certificate of approbation from their school teacher. To such articles particular attention will be given, and premiums at the discretion of the Committee.

MANUFACTURES OF STRAW. For the best Straw Bonnet — first premium, $8; second do., $6.

For the best specimen of Straw Braid, — not less than 100 yards, — first premium, $3; second do., $2.

Manufactures of Cloth, Flannels, Hosiery, &c. *Cotton Cloth.* For the best specimen of Cotton Cloth, of any description, not less than twenty-eight yards in quantity, a premium or gratuity, at the discretion of the Committee.

Woollen Cloth. For the best specimen of Woollen Cloth, of any description, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

Cotton and Woollen mixed. For the best specimen of Cotton and Woollen Cloth, of any description, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

Flannels. For the best specimen of Flannel, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

For the best specimen of Cotton Flannel, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

For the best pair of Woollen Blankets, a premium or gratuity, at the discretion of the Committee.

Hosiery, &c. For the best specimen of Silk Hose, a premium of $1.50.

For the best specimen of Silk Half Hose, a premium of $1.

For the best specimen of Woollen Hose, a premium of $1.

For the best specimen of Woollen Half Hose, a premium of 50 cents.

For the best specimen of Cotton Hose, a premium of 50 cents.

For the best specimen of Cotton Half Hose, a premium of 25 cents.

For the best specimen of Worsted Hose, a premium of $1.

For the best specimen of Worsted Half Hose, a premium of 50 cents.

For the best specimen of Sewing Silk, not less than one pound, a premium of $2.

For the best specimen of Knitting Yarn, not less than one pound, a premium of $1.

For the best specimen of Spool Thread, not less than one pound, a premium of $1.

For the best Fleece of Wool, a premium of $1.

For the best dozen Grain Bags, a premium of $1.

For the best specimen of neat and thorough mending, patching, or darning of garments, hose, &c., a premium of $1.

CARPETINGS, RUGS, AND FLOOR CLOTH.

For the best "Common" Ingrain 2 ply Carpeting;
Do. do. "Fine" do. do. do.
Do. do. "Superfine" do. do. do.
Do. do. "Common," "Fine," or "Superfine" Ingrain 3 ply Carpeting;
Do. do. Brussels Floor Carpeting;
Do. do. Tapestry do. do.
Do. do. Velvet Carpeting.

For each of these descriptions of Carpeting, a premium or the Society's Diploma, at the discretion of the Committee.

NOTE. Ingrain 2 ply Carpetings will be judged by the comparative merits of pieces of similar weight; or, disregarding weight, by the quality of colors, the taste of shading, and the evenness in spinning and weaving.

For the best piece of Stair Carpeting, the Society's Diploma.

For the best Hearth-Rug, the Society's Diploma.

For the best specimen of Painted Floor Cloth, a premium or the Society's Diploma, at the discretion of the Committee.

COUNTERPANES. For the best Counterpane — regard being had to quality and expense of materials — first premium, $3; second do., $2.

NOTE. Any article, in either of the foregoing departments, which shall have been manufactured in *the family* of the person presenting it, will receive the particular consideration of the Committee, and, if worthy, a suitable premium.

GLASS, EARTHEN, STONE, AND WOODEN WARE. For the finest collections and best specimens of articles in each of these departments, a premium or gratuity, at the discretion of the Committee.

BRASS, COPPER, TIN, IRON AND BRITANNIA WARE. For the finest collections and best specimens of articles in each of these departments, a premium or gratuity, at the discretion of the Committee.

CABINET WORK. For the best specimen of Cabinet Work, a premium or the Society's Diploma.

IRON FENCING, GATES, AND POSTS. For the best specimens of each — regard being had to cost and utility, as well as ornament — a premium or gratuity, at the discretion of the Committee.

Stoves. For the best Farmer's Cauldron Stove;
Do. do. Cooking do.
Do. do. Parlor do.
— a premium of $2 each.

Horse and Ox Shoes. For the best specimens of Horse and Ox Shoes, a premium of $1.

For the best specimen of Horse Shoes *for meadow land*, a premium of $1.

India Rubber Goods. For the finest collection and best specimens of India Rubber goods, a premium or gratuity, at the discretion of the Committee.

Brushes, Combs, Hats, Caps and Gloves. For the finest collection and best specimens of each of these articles, a premium or gratuity, at the discretion of the Committee.

Leather, and Articles manufactured therefrom.

For the best specimen of	Thick Boots,	a premium of		$2.00
Do.	do.	Calfskin,	do.	3.00
Do.	do.	Thin Boots other than Calfskin,	do.	2.00
Do.	do.	Kipskin,	do.	2.00
Do.	do.	Thick Brogans,	do.	1.00
Do.	do.	Fine Brogans,	do.	1.00
Do.	do.	Ladies' Boots,	do.	1.00

For the best specimen of Upper or Sole Leather, or Morocco, a premium or gratuity, each, at the discretion of the Committee.

For the best single Carriage Harness;
Do. do. double do. do.
Do. do. Cart Harness, — a premium or gratuity, each, at the discretion of the Committee.

For the best	Riding Bridle,	a premium of		$1.00
Do.	do.	do. Saddle,	do.	2.00
Do.	do.	Carriage or Cart Whip,	a premium of	1.00

Carriages, Wagons, Carts, &c.

For the best specimen of Family Carriages, for one horse or for two horses;
Do. do. Covered Wagon;
Do. do. Open do.
Do. do. Farm do.
Do. do. do. Cart;

For the best Farm Wheelbarrow, — a premium or gratuity, each, at the discretion of the Committee.

Jellies, Preserves, Pickles, and Ketchups. For the finest collection and best specimens of each, made of articles of domestic growth, a premium or gratuity, at the discretion of the Committee.

New Inventions. For any new invention of decided superiority and usefulness to the farmer, a premium or gratuity, at the discretion of the Committee.

Note. It is to be understood that all articles presented for premium, in each of the foregoing departments, shall have been manufactured or produced within the County during the last year, and by the person presenting them. Also, that, in every case, the examining Committee shall have the right to substitute the Society's Diploma for a premium or gratuity, or to give it where no premium or gratuity has been awarded, at their discretion.

Articles in either of the above departments, contributed to the exhibition by persons not resident in the County, shall receive suitable attention from the Committee, and, if worthy, be awarded the Society's Diploma.

FRUITS AND FLOWERS.

Accommodations will be provided for the exhibition of Fruits and Flowers, and Committees will be appointed to examine and report on such as may be presented. Whoever may present, is requested to furnish a minute, in writing, of the name of the owner, and a list of his contributions.

FRUITS.

For the best collection of *Apples* — first premium, $5; second do., $3; third do., $2.

For the best collection of *Pears* — first premium, $5; second do., $3; third do., $2.

For the best collection of *Peaches* — first premium, $5; second do., $3; third do., $2.

For the best *dish* of Pears, not less than one dozen specimens, a premium of $2.

For the best *dish* of Apples, not less than one dozen specimens, a premium of $2.

Grapes. For the best collection of *Foreign Grapes* — first premium, $5; second do., $3.

For the best collection of *Native Grapes*, a premium of $3.

Flowers. Premiums will be awarded on Flowers and Bouquets, in amount not exceeding $15.

AGRICULTURAL IMPLEMENTS.

For the most extensive and finest collection of Agricultural Implements — first premium, $15; second do., $10; third do., $5.

For the best Agricultural Implements manufactured within the County and exhibited by the manufacturer — first premium, $6; second do., $4.

For the best report, by any member of the Society, of any new or improved Agricultural Implement — describing its construction and operation, its cost and its benefit, and, in particular, its applicability to the soil of Norfolk County — a premium, if worthy of record, in proportion to the value of such report, at the discretion of the Committee.

AGRICULTURAL LABORERS.

For a certificate — signed by his employer, and countersigned by any two trustees of the Society residing in the same town — of the superior character and qualifications of any man or boy, in the employment of a member of the Society for a period, next preceding, of not less than two years, attesting the industry, integrity, respectful demeanor, and general good habits, during that time, of the bearer of such certificate,

A premium of Membership of the Society, and a Diploma.

PRIZE ESSAYS.

For the best Essay on either of the following subjects, which may be considered by the Trustees worthy of publication: —

Forest Trees. For the best Essay on the raising and cultivation of Forest Trees, a premium of $10.

Insects. For the best Essay for the destruction of Insects injurious to vegetation, such as the *Curculio*, *Borer*, *Canker-Worm*, *Caterpillar*, *Cut-Worm*, *Squash-Bug*, *Striped-Bug*, *Rose-Bug*, *&c.*, *&c.*, a premium of $20.

Potato Disease. For the best Essay on the prevention of the Potato Disease, a premium of $10.

PRESERVATION OF WINTER FRUIT. For the best Essay on the preservation of Apples and other Winter Fruits, $10.

PRESERVATION OF VEGETABLES. For the best Essay on the preservation of Vegetables, a premium of $10.

AGRICULTURAL EDUCATION. For the best Essay on Agricultural Education, a premium of $10.

FARM ACCOUNTS. For the best Essay on a system of Farm Accounts, $10.

For the most valuable Essay upon the comparative value and adaptation to the climate and soil of Norfolk County of the several foreign and native breeds of Cows and Oxen, $10.

For the best Prize Essay on Domestic Poultry, $25.

For the best Essay on *Fences for Farms*, uniting economy, strength, and appearance, a premium of $10.

For the best Essay on the extermination of *Weeds and Plants*, destructive to crops, a premium of $10.

For the best Essay on the preservation and application of Liquid Manure, a premium of $10.

For the best Essay on the introduction of new Fruits and new articles of Field Culture, a premium of $10.

For the best Essay on the best manner of subdividing farm cultivation with reference to Economy and Profit, a premium of $10.

For the best Essay on the value and application of Phosphate of Lime, as a fertilizer of the soil, a premium of $10.

For the best Essay on Bees and structure of Hives, with particular reference to feeding Bees, and guarding against the spoliations of the Bee Moth, a premium of $10.

For an Essay on any subject connected with Agriculture, Horticulture, Manufactures, or Mechanics, which the Trustees may consider worthy, a premium of $10.

For the best plan for a Barn and Barn Yard, with regard to the keeping of the Hay, the comfort of the Cattle, the ease and convenience of tending them, and the making and preserving the Manure, a premium of $10.

For the best Essay on the proper time and manner of cutting the trees on wood land, a premium of $10.

These premiums will not be awarded unless the Essays offered, shall, in the judgment of the Committee appointed to decide upon them, be deemed in themselves worthy of an Award without reference to their comparative merit.

RULES AND GENERAL REMARKS.

It is understood that all premiums will be restricted to articles of the growth and manufacture of the County, unless otherwise specified in connection with it. Essays and agricultural implements being excepted from this rule, are open to general competition.

Any gentleman, not a member of the Society, entitled to a premium of five dollars, or upwards, shall receive the amount exceeding the sum of five dollars, and shall thereafter become a member.

The stock and articles intended for exhibition and premium, butter excepted, must be on the ground at or before 12 o'clock on Tuesday, the first day of the Exhibition. Animals will not be allowed to be removed from the pens before 3 o'clock on Wednesday, the second day, and all other articles not until 5 o'clock, without the permission of the Committee.

The animals while on the ground will be fed at the expense of the Society.

No person serving on any of the Committees shall have a vote in any case, when he shall be personally interested as a competitor.

All other Entries for premiums must be made in writing, and shall be placed in the hands of the Recording Secretary, on or before the 15th of November.

Premiums awarded, and not called for within *six months*, will be considered as given to the Society, in aid of its funds.

After the objects for Exhibition are arranged, they will be under the care of the Committees, and cannot be removed without their consent.

No object or article will be entitled to a premium, unless it possesses points of superiority; and the Committees have the discretionary power of withholding premiums, if, in their opinion, the articles or objects are not deemed worthy to receive the same.

The Trustees have carefully revised and approved of the foregoing proposals for *Premiums*. The respective Committees, appointed to award the same, are required to enforce a strict conformity to all of the rules in relation to Entries and Certificates.

In the appointment of *Committees*, the Trustees will seek for the most judicious and skilful individuals in the various towns in the County, *to award the Premiums;* but should they fail to secure the aid of the ablest and most experienced men in the above capacity, they will rely upon the forbearance which, they believe, will be generously extended towards sincere and unwearied efforts.

As it will become the duty of the Society to make to the Legislature an exact report of its doings, the Trustees deem it of the highest importance, that earnest and persevering efforts should be made by the citizens of every town in the County, to bring out the results of their skill and industry.

MARSHALL P. WILDER, *President.*

EDWARD L. KEYES, *Secretary.*